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AUDIO-VISUAL METHODS FOR AIR POLLUTION INFORMATION. VOLUME II. AN EVALUATION OF A SELECTED DISSEMINATION PLAN AND VIEWER RESPONSE FOR THE FILE BEWARE THE WIND

George Washington University Medical Center
Warrenton, Virginia

1974

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IX.

In order to provide a statistically sound evaluation, we commissioned Dr. A. William Bluem, Director, Studies in Public Communication, and Professor of the Samuel I. Newhouse Communications Center, Syracuse University, to perform a study of the effectiveness of this project.

Dr. Bluem's report is included herein.

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STUDIES IN PUBLIC
COMMUNICATION

A. WILLIAM BLUEM
PRESIDENT

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Telephone:
Area Code 315
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May 22, 1969

MEMORANDUM

TO: Dr. Murdock Head, Director
Airlie Foundation of the
George Washington University
Medical Center
Airlie Conference Center
Warrenton, Virginia

FROM: A. William Bluem, Ph.D.
Professor: Samuel I. Newhouse
Communications Center of
Syracuse University
Syracuse, New York

SUBJECT: BEWARE THE WIND: AN EVALUATION

Attached herewith is a final report of the results of a series of evaluations conducted at the S. I. Newhouse Center over the past several months. All of the test results reported here are concerned only with the first of two films dealing with air pollution with which we are now working -- Beware The Wind.

As you examine our report, you will note that we made greater effort to broaden the bases for evaluation of the air pollution work you have completed. The innovations in testing are designed to provide both qualitative and quantitative bases for judgment of success.

As in the earlier studies we have conducted for Airlie, the first phase of investigation here has been devoted to the problems of dissemination within the ETV-PTV complex. We have attempted, as in the past, to develop and assess effective approaches to ETV dissemination as well as to gain increased feedback from ETV specialists.

More important, perhaps, is the intensive effort which has gone into the second phase of this evaluation, where we have been able to design and develop more sophisticated mechanisms for providing quantitative indices of the actual impact of Beware The Wind upon a variety of sample viewing audiences. We have been able to bring forth some certain statistical evidence regarding the film's effectiveness as an information transmitting artifact as well as an extensive series of judgments upon its overall impact. For the former, we have been

RESEARCH, CONSULTATION, EDITORIAL SERVICES IN NON-PRINT PUBLIC COMMUNICATION

able to employ Syracuse University computer facilities, thus enabling us to make series of comparative analyses related to viewer characteristics which were heretofore impossible to achieve.

All in all, we have tried to provide as complete and objective an evaluation of the effectiveness of both dissemination technique and production method as possible within the normal limitations of time-frame and budget.

I hope you find this report satisfactory.

A. Wm. Bluem

AWB/gv

Enclosure

THE DISSEMINATION
OF
BIO-MEDICAL INFORMATION
BY
AUDIO-VISUAL MEANS

****

AN
EVALUATION OF A SELECTED
DISSEMINATION PLAN AND
VIEWER RESPONSE FOR THE
FILM BEWARE THE WIND

Prepared for the
Airlie Foundation of
The George Washington
University Medical Center
by
Studies in Public Communication
A. William Bluem, Director A. Wm. Bluem

04<

EVALUATION PROJECT STAFF

Project Director and Principal Investigator	A. William Bluem
Associate Project Director	James R. Treble
Staff Consultant	Gloria Verish

PART I

ETV DISSEMINATION OF FILMED PROGRAMS DEALING WITH BIO-MEDICAL SUBJECTS - - EVALUATION OF A SELECTED PLAN

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PART I

A - STUDY CONCLUSIONS
-- AN OVERVIEW

B - ETV STATION COOPERATION

C - ANALYSIS OF POTENTIAL VIEWERSHIP FOR THE TEST FILM

D - EVALUATION OF THE TEST FILM BY ETV PERSONNEL

E - THE DISSEMINATION MODE:
SUMMARY AND RECOMMENDATIONS

A.

STUDY CONCLUSIONS --
AN OVERVIEW

C8<

A

WELL OVER TWO-THIRDS OF ETV STATIONS NOW OPERATING IN THE UNITED STATES HAVE A HIGH LEVEL OF INTEREST IN AIRING PROGRAM MATERIAL DEALING WITH AIR POLLUTION. AT LEAST HALF OF ALL STATIONS WOULD WILLINGLY EXTEND PRIME TIME FOR THE TELEVISING OF FILMS SIMILAR IN DESIGN, PURPOSE AND QUALITY TO THE TEST FILM. THE CURRENT STUDY CONFIRMS SIMILAR FINDINGS IN EARLIER STUDIES OF THIS TYPE.

B

UNDER CONDITIONS OF FULL-SCALE NATIONAL APPLICATION, DISSEMINATION THROUGH THE ETV-PTV COMPLEX WOULD PRODUCE SIGNIFICANT VIEWERSHIP. PRELIMINARY DATA ALSO REVEALS AN UNEXPLORED POTENTIAL FOR THE USE OF ETV TELECASTS AS A STIMULANT TO ADDITIONAL COMMUNITY "CAPTIVE-AUDIENCE" SCREENINGS.

C

THE DISSEMINATION METHOD, GEARED TO U. S. COMMERCIAL TV OUTLETS, IS GENERALLY SUITABLE FOR EDUCATIONAL OR PUBLIC TELEVISION STATIONS. SOME VARIATIONS IN METHOD ARE SUGGESTED, HOWEVER, IN ORDER TO ASSURE MAXIMUM EFFECTIVENESS FOR ETV.

D

THE FINDINGS REVEAL AN EXCEPTIONALLY HIGH LEVEL OF RESPECT AND REGARD FOR THE PROFESSIONAL QUALITY OF THE TEST-FILM AMONG ETV PERSONNEL.

E

THE FINDINGS CLEARLY INDICATE THAT POSITIVE VALUES ARE TO BE DERIVED FROM A CONTINUING ETV DISSEMINATION PROGRAM.

B.

ETV STATION COOPERATION

On September 17, 1968, a list of 125 U. S. Educational Television Stations -- selected from over 150 stations then on the air -- was submitted to Dr. Murdock Head at the Airlie Foundation. Stations not submitted as potential evaluation sites included many of those which participated in an earlier evaluation of this type as well as those in communities where Dr. Head's staff already had definite commitment for commercial-station airing. After a series of discussions, a great many additional stations were deleted from the original list submitted. The eliminated stations served communities where, it was felt, the potential for a commercial airing of the film might be jeopardized if an ETV station carried the same program. Following these deliberations it was agreed that 25 stations -- named below -- would be invited to participate in the evaluation project.

LIST OF ETV STATIONS INVITED TO PARTICIPATE IN THE EVALUATION

KVIE-TV
Central California Educational Television
Box 6
Sacramento, California 95801

WBIQ-TV
Alabama Educational Television Commission
2151 Highland Ave.
Birmingham, Alabama 35205

KUAT-TV
Universities and State College of Arizona
Herring Hall
Tucson, Arizona 85700

KIXE-TV
Northern California Educational TV Association
2410 Larkspur Lane, Box 9
Redding, California 96001

WHYY-TV
Fifth and Scott Sts.
Wilmington, Delaware

WUFT-TV
University of Florida
226 Administration Bldg.
Gainesville, Florida 32603

WJCT-TV
Community Television Inc.
2037 Main St.
Jacksonville, Florida 32206

WFSU-TV
State Board of Regents of Florida
Acting for Florida State University
Tallahassee, Florida

WGTV
Regents of the University System of Georgia
244 Washington St., S.W.
Atlant, Georgia 30334

KUID-TV
Regents of the University of Idaho
Moscow, Idaho

KTWU-TV
Washburn University
17th & College Sts.
Topeka, Kansas 66604

WFPK-TV
Board of Trustees
Louisville Free Public Library
301 Library Place
Louisville, Kentucky 50203

WYES-TV
Greater New Orleans Educational
Television Foundation
916 Navarre Ave.
New Orleans, La. 70124

WCBB-TV
Colby-Bates-Bowdoin ETC
c/o Bates College
Lewiston, Maine 04240

WMSB-TV
Board of Trustees
Michigan State University
East Lansing, Michigan 48823

WDSE-TV
Duluth-Superior Area Educational
TV Corp.
403 Bradley Bldg.
Duluth, Minn. 55802

KCSD-TV
1211 McGee St.
Kansas City, Missouri

KETC-TV
St. Louis Educational TV Commission
6996 Millbrook Blvd.
St. Louis, Missouri 63130

KUON-TV
University of Nebraska
Lincoln, Nebraska 68508

WNED-TV
Western New York Educational TV
Association, Inc.
Lafayette Hotel
Buffalo, N. Y. 14202

WMHT-TV
Mohawk-Hudson Council on
Educational TV Inc.
Riverside School
Front St.
Schenectady, N. Y. 12305

WCNY-TV
ETV Council of Central New York, Inc.
Old Liverpool Rd.
Liverpool, N. Y. 13088

WOUB-TV
Ohio University
Athens, Ohio 45701

WBGU-TV
Bowling Green State University
Bowling Green, Ohio 43402

WCET-TV
Greater Cincinnati Television Educational Foundation
2222 Chickasaw St.
Cincinnati, Ohio 45219

BETWEEN SEPTEMBER 20 AND NOVEMBER 8, 1968 THE 25 STATIONS LISTED ABOVE WERE SENT THE FOLLOWING LETTER.

SAMPLE

Dear Sir:

I have been asked once again to evaluate a communications project, sponsored by the Public Health Service of the Department of Health, Education and Welfare, which involves the production and dissemination of documentary films on public health problems. Such films were designed expressly for television distribution. The evaluation is part of a continuing project.

The grantee is The Airlie Foundation's Dr. Murdock Head. I am familiar with Dr. Head's documentary work and share the enthusiasm for his films which is expressed by many critics. Some years ago one of his films, featuring former President Eisenhower, REPRIEVE, was given an Emmy award by the Washington Chapter of The National Academy of Television Arts and Sciences.

My responsibility as Project Evaluator is three-fold. My first task is to ask various educational television stations in key areas to agree to screen a film sometime within the next 90 days, and in the best program time possible.

My second responsibility is to solicit from those stations who do carry the film any available documented evidence regarding its reception in the area. It would also be useful to have some brief statements of personal judgment on the film by key staff members of each station. We will provide a brief outline for this procedure at a later time.

Finally, I am to coordinate these reports and submit them to The Airlie Foundation of George Washington University for inclusion in Dr. Head's final report to the funding organization.

The film which I have been asked to evaluate in this manner is called Beware The Wind. It has already been carried on several commercial stations in the country in the first phase of evaluation. A brochure describing this Emmy award-winning film is included with this letter.

Beware The Wind is a 16 mm color documentary, produced by the George Washington University Airlie Center to focus professional and public attention on Air Pollution, the problem it creates, and possible approaches to a solution. The film is narrated by Robert Preston.

Air Pollution is a major concern in all cities of any size throughout the world. Beware The Wind ranges from Fairbanks, Alaska to Venice, Italy, in an attempt to achieve a comprehensive presentation of this problem. Beware The Wind will be made available to broadcasters, civic and professional groups throughout the United States to increase public awareness and encourage community action. These telecasts will be presented in cooperation with the American Academy of General Practice, civic leaders and local medical societies.

An "open-end" is provided for a discussion by several prominent doctors from your area medical society who are active and interested in the local pollution situation in your community. Because of its past experience, the Airlie Center can supply -- if you would like -- suggestions for the development of this portion of the program.

It is my hope to complete this distribution to several educational television test cities before the end of the year. There is no expense involved either from the station or the medical society for these programs. The only compensation to The Airlie Center is to have them shown in prime evening time, in color if possible, with as much local promotion as can be afforded.

Please let me know at your earliest convenience if you can cooperate in this important project. We can work out the details of your scheduling once you have had an opportunity to consider this proposal. I would be happy to supply you with a screening print in advance.

I should add that once you have scheduled the film, The Airlie Foundation will immediately get in touch with the medical society in your area and they will handle all the details of the closing discussion.

May I hear from you at your earliest convenience?

Sincerely yours,

A. William Bluem
Professor
S. I. Newhouse Communications Center

AWB/gv
Enclosure

INITIAL TOTAL RESPONSE

Of the 18 stations (72%) which responded to the initial inquiry, all but two expressed direct interest in the project and requested a screening print.

Station WCBB-TV, Lewiston, Maine, replied: "For a number of reasons, not the least of which is our total lack of production facilities for the follow-up discussion portion of the program, the decision has been made not to participate in the current evaluation project." Station KCSD-TV in Kansas City, Missouri, stated, "We do not have the personnel or funds available for a local follow-up. Hopefully, in the very near future it will be possible for us to participate in this type of project."

The Evaluation Center was prepared, then, to distribute screening prints to 16 of the initial 25 stations or groups with which it established a liaison. At that point the Airlie Center office delayed shipment to five outlets because new additional commercial contacts had been established and it was held that these should be given priority. As a result, the following ETV stations were withdrawn from screening print distribution pending later action at the discretion of the Airlie Center:

WFPK-TV, Louisville, Kentucky
WYES-TV, New Orleans, La.
WDSE-TV, Duluth, Minn.
KETC-TV, St. Louis, Mo.
WCET-TV, Cincinnati, Ohio

The group of respondents actually receiving screening prints was thus reduced to 11 out of the initial group which were invited to participate. Since five of the original 25 were eliminated from the sample after requesting a screening print, the true original sample should be reduced from 25 to 20 and all further estimates of participation calculated upon that base.

ACTUAL RESPONSE

BY THE CONCLUSION OF THIS STUDY, THEN, 11 of 20, OR 55% HAD RESPONDED POSITIVELY, BY INDICATING THEIR INTEREST IN PARTICIPATING AND ACTUALLY RECEIVING A SCREENING PRINT OF BEWARE THE WIND. SCREENING PRINTS WERE FORWARDED TO THE FOLLOWING STATIONS:

STATION	CITY
WOUB-TV	Athens, Ohio
WUFT-TV	Gainesville, Florida
KVIE-TV	Sacramento, California
WFSU-TV	Tallahassee, Florida
WGTV-TV	Athens, Georgia
KTWU-TV	Topeka, Kansas
WMSB-TV	E. Lansing, Michigan
WNED-TV	Buffalo, New York
WCNY-TV	Liverpool, New York
KUON-TV	Lincoln, Nebraska
WHYY-TV	Philadelphia, Pennsylvania

FINAL RESPONSE

(Stations Which Have Aired or Have Definitely Scheduled Airing)

OF THE 11 RESPONDENTS, ALL SCHEDULED THE FILM. SEVEN ETV STATIONS AIRED THE FILM AT LEAST ONCE BEFORE MAY 20, 1969, AND FOUR OTHERS HAVE AGREED TO AIR IT BEFORE JUNE 30, 1969. IN ADDITION, TWO OF THESE SOURCES REPRESENTED FOURTEEN ADDITIONAL ETV OUTLETS -- THE ENTIRE GEORGIA EDUCATIONAL TELEVISION NETWORK AND THE ENTIRE NEBRASKA EDUCATIONAL TELEVISION NETWORK. AS A RESULT, THE ELEVEN INQUIRIES PRODUCED A TOTAL OF TWENTY-THREE TV STATIONS WHICH ACTUALLY PARTICIPATED IN THE EVALUATION PROJECT. ONLY THE ORIGINATING STATIONS (WGTV, ATHENS - KUON-TV, LINCOLN) ARE INCLUDED IN THE LIST OF PARTICIPATING STATIONS ON THE FOLLOWING PAGE. THE ADDITIONAL STATIONS ARE CITED IN THE ANALYSIS OF VIEWERSHIP IN A SUBSEQUENT SECTION OF THIS REPORT.

STATIONS SCHEDULING BEWARE THE WIND

STATION	CITY	DATE AIRED OR SCHEDULED
WOUB-TV	Athens, Ohio	March 23, 1969 9:30 p.m. March 27, 1969 6:30 p.m.
WUFT-TV	Gainesville, Florida	Date and Hour - to be Announced
KVIE-TV	Sacramento, California	Date and Hour - to be Announced
WFSU-TV	Tallahassee, Florida	December 17, 1968 10:30 p.m.
WGTV-TV	Athens, Georgia	January 31, 1969 7:00 p.m.
KTWU-TV	Topeka, Kansas	May 16, 1969 6:30 p.m.
WMSB-TV	E. Lansing, Michigan	May 4, 1969 8:00 p.m.
WNED-TV	Buffalo, New York	Date and Hour - to be Announced
WCNY-TV	Liverpool, New York	May, 1969
KUON-TV	Lincoln, Nebraska	Date and Hour - to be Announced
WHYY-TV	Philadelphia, Pennsylvania	October 14, 1968

ETV RESPONSE

CHARTS

BEWARE THE WIND

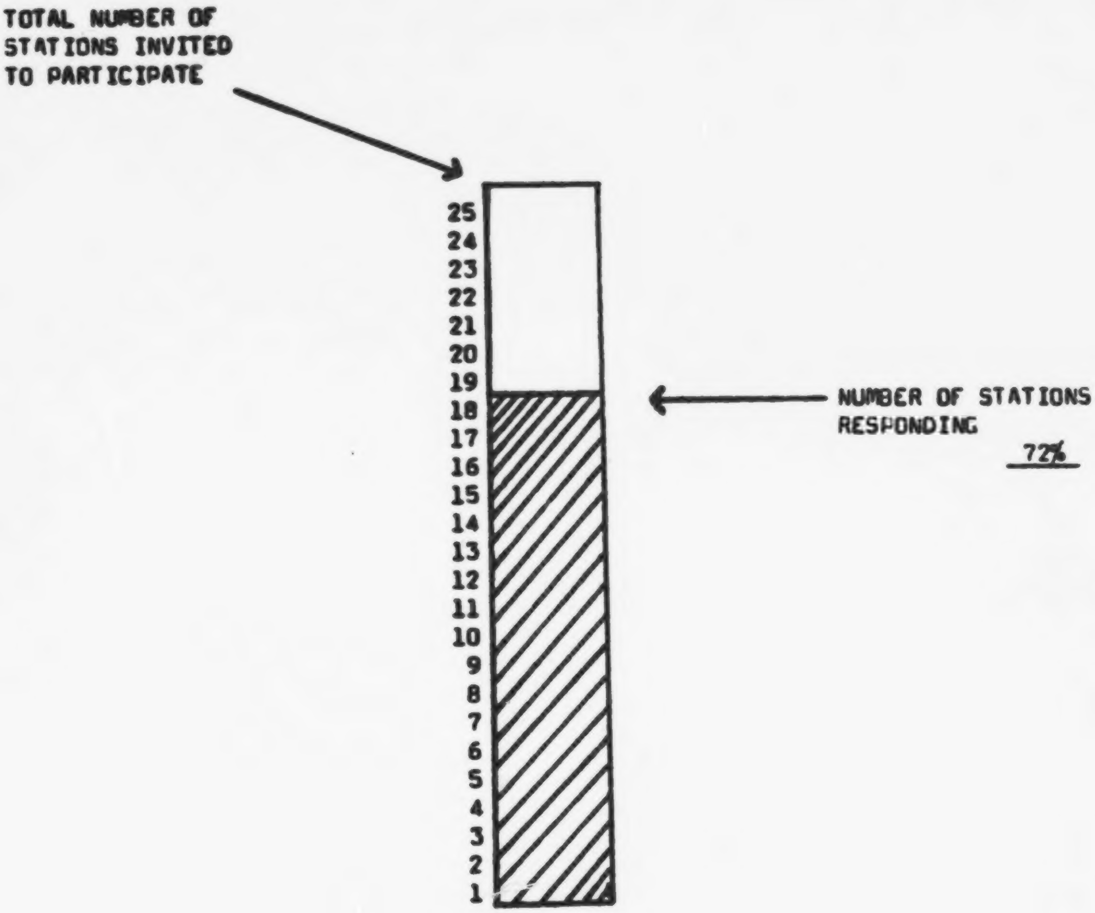


CHART I

RESPONSES TO ORIGINAL SAMPLE

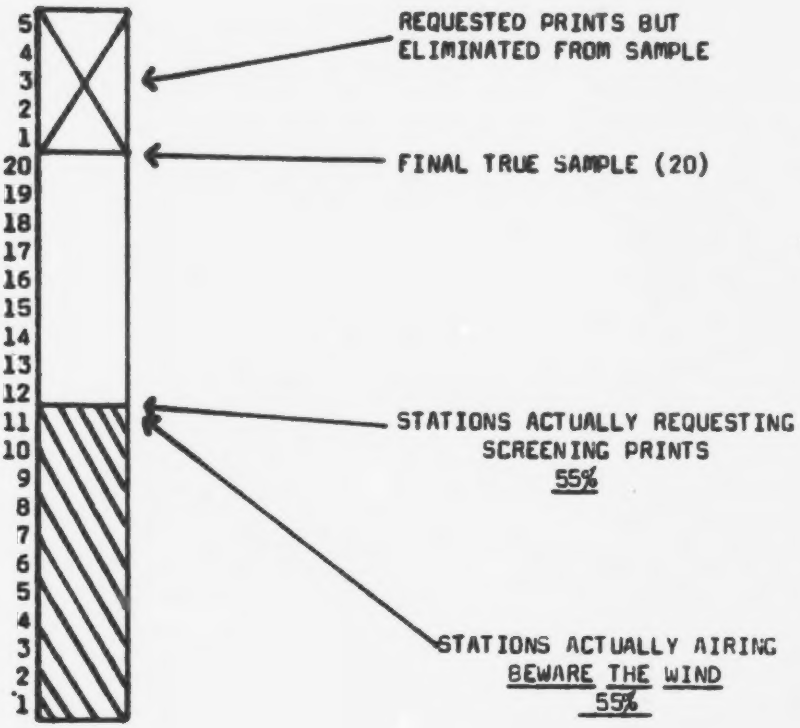


CHART II

REQUEST FOR SCREENING PRINTS WITHIN REDUCED SAMPLE AND ACTUAL AIRING FIGURE

C.

ANALYSIS OF POTENTIAL VIEWERSHIP FOR THE TEST FILM

TABLE I

AN ESTIMATE OF MAXIMUM POTENTIAL VIEWING AUDIENCE FOR BEWARE THE WIND

STATION AND CITY	TOTAL TV* HOMES	UHF HOMES**	TOTAL HOMES WHICH COULD RECEIVE PROGRAM
WOUB-TV (UHF) Athens, Ohio	100,000	40.000	40,000
WHYY-TV Philadelphia, Pa.	2,604,000	941,600	941,600
WUFT-TV (VHF) Gainesville, Fla.	200,000		200,000
KVIE-TV (VHF) Sacramento, Calif.	705,900		705,900
WFSU-TV (VHF) Tallahassee, Fla.	240,200		240,200
WGTU-TV Athens, Georgia			600,000***
KTWU-TV (VHF) Topeka, Kansas	173,900		173,900
WMSB-TV (VHF) Lansing, Mich.	848,600		848,600
WNED-TV (UHF) Buffalo, N. Y.	663,200	265,280	265,280
WCNY-TV (UHF) Liverpool, N. Y.	605,400	242,000	242,000
KUON-TV (VHF) Lincoln, Nebraska	264,800		264,800

ESTIMATED MAXIMUM NUMBER OF VIEWING HOMES CAPABLE OF RECEIVING BEWARE THE WIND	4,522,280
ESTIMATED MAXIMUM POTENTIAL VIEWING AUDIENCE (2.5 VIEWERS PER HOME)	11,305,500

DISCUSSION: TABLE I

*The total number of TV homes served by each station is calculated on the basis of homes within the coverage area of the least powerful commercial TV station in the market, as reported in the 1968 edition of *Television Factbook*.

**Estimated homes for the four UHF stations in the sample is calculated on the basis of a national UHF conversion or new set purchase rate of approximately 40%. (Rough estimate provided by Dr. Lawrence Myers, Jr., Director of TV Research, Syracuse University Newhouse Communication Center.)

***In addition to Station WGTV in Athens, *Beware The Wind* was shown (January 31, 1969) on seven additional stations in Georgia in a simultaneous Georgia Educational Television Network airing. WGTV-TV, the flagship station in Athens, originated the airing which was also carried on WVAN-TV in Savannah (VHF), WXGA-TV in Waycross (VHF), WJSP-TV in Warm Springs (UHF), WCLP-TV in Chatsworth (UHF), WCES-TV in Wrens (UHF), WABW-TV in Pelham (UHF), and WACS-TV in Dawson (UHF). The 600,000 homes figure is a minimum estimate of the potential viewing homes for this telecast. In addition to KUON-TV in Lincoln, Nebraska, *Beware The Wind* was shown on five other ETV outlets in the Nebraska ETV network: KTNE-TV, Alliance; KMNE-TV, Bassett; KLNE-TV, Lexington; KPNE-TV, North Platte; KYNE-TV, Omaha. The TV homes for the Georgia network are estimated at 600,000. The figure given for the Lincoln, Nebraska station represents the potential coverage for Lincoln only. Thus the grand total does not include added Nebraska network homes.

ESTIMATED TOTAL NUMBER

OF

ACTUAL VIEWERS

As suggested in earlier evaluations, the total number of homes capable of receiving a telecast by no means indicate the actual viewing audience. The average cumulative weekly audience for ETV stations is estimated at 20 to 25 per cent, but it is estimated that the average actual viewing audience for any single ETV program ranges between .6 and 1.0 per cent. Using a base of .8 per cent, then, it may be estimated that approximately 90,444 viewers actually saw Beware The Wind in the various communities in which it was aired.

As in past evaluations, we have attempted to project the actual audience for this film on a nation-wide basis. If we consider a 50 per cent airing-decision rate for such films as a base (both The Wasted Ones and The Savage Cell evaluations also support this as a minimum figure), it could be assumed that at least 75 ETV stations would carry such films in a full national dissemination effort. The twenty-three stations which aired Beware The Wind represent roughly 30 per cent of a 75 total, and projecting an audience figure of roughly 90,444 for the 23 stations into 53 additional stations would yield a rough total for national dissemination of some 250,000 viewers. Such a figure is disappointingly low, but our earlier evaluations suggest that it is not anywhere near a true estimate, since many key ETV stations, including those in the largest population centers, are not in our sample because of potential conflict with commercial station dissemination for Beware The Wind. The success, in terms of pure numbers in audience exposure, for ETV dissemination is absolutely dependent, then, upon ETV station selection. Unless *all* of ETV's "Big Eight" -- stations located in Boston, Chicago, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco and Washington -- are included, total ETV viewership will remain low. At the risk of belaboring the obvious, if numbers only are a goal, then the dissemination pattern for ETV could well be developed around some 20 or 30 stations in the top markets and the rest might be ignored altogether.

We may summarize this effort in ETV dissemination by simply concluding that some 90,000 people who might never have seen *Beware The Wind* did actually witness the film, and a full-scale ETV dissemination effort (meaning a line-up of some 70-80 stations *including* at least four of the "Big Eight") would probably produce an audience for the film of well over 1,000,000. Under most circumstances, this must be regarded as a formidable number of viewers, particularly in view of the specialized nature of the TV audience. A review of how this audience can serve the general design of this project is undertaken in the final section of this phase of the study.

D.

EVALUATION OF THE
TEST FILM BY
ETV PERSONNEL

Approach

Past experience led the evaluation team to conclude that a specially designed questionaire would prove a more effective method of eliciting opinion regarding test films from ETV personnel. It was felt that a greater number of people would take the time to answer a questionaire, and that answers would focus with greater specificity on things we wished to know.

Therefore, the attached questionaire (see following page) was devised, and six copies were sent to the principal contact at each station which requested a screening print. The contact was asked to complete one questionaire himself and to distribute the other five to "staff members whose creative judgment he respected." As in past studies, the principal contact was also asked to provide his own reactions to the film, any published critical comment or review in local media, and comments (in writing) from other knowledgeable persons in the community.

Response

While past investigations produced few if any evaluative comments, the current study elicited a significant number of direct responses to the questionaire. A total of thirteen (13) responses, representing personnel from the staffs of four (4) ETV Stations were returned by our cut-off date for this phase of the study. Included among the 13 responses were the opinions of station managers, program managers, assistant program managers and various staff producers and directors. The results are reported in raw score and percentage in the following tables.

ETV EVALUATION

SAMPLE QUESTIONAIRE

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(____) Very Well (____) Satisfactorily (____) Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

(____) Very Well (____) Satisfactorily (____) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(____) Yes (____) No

Comment: ____________________

4. Which, if any, of the film production techniques used could have been improved?

____

5. How does this film compare with similar program material from other sources?

(____) EEN	Better (____)	As Good (____)	Worse (____)
(____) NET	Better (____)	As Good (____)	Worse (____)
(____) Other __________	Better (____)	As Good (____)	Worse (____)

6. Does the film's length influence your feelings about running it on-the-air?

____

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

____

8. Is the film brought to a suitable summary and close?

____

9. Is the subject "air pollution" of interest locally?

____

10. Is this the type of film you would want to repeat again during the broadcast week?

____

Respondent's Name ____________________

Station Represented ____________________

QUESTION NO. 1

IN YOUR OPINION, HOW DOES THE FILM CONVEY THE IDEA THAT AIR POLLUTION IS MORE THAN A LOCAL PROBLEM?

	Total Responses	%
Very Well	8	61.6
Satisfactorily	5	38.5
Poorly	0	0

QUESTION NO. 2

HOW WELL WILL THE FIRST FEW MINUTES OF BEWARE THE WIND HOLD THE TV AUDIENCE?

	Total Responses	%
Very Well	5	38.5
Satisfactorily	6	46.2
Poorly	2	15.4

QUESTION NO. 3

ARE THE PERTINENT FACTORS ON AIR POLLUTION DEVELOPED LOGICALLY AND SMOOTHLY IN THE FILM?

	Total Responses	%
YES	11	84.6
NO	2	15.4

QUESTION NO. 4

WHICH, IF ANY, OF THE FILM PRODUCTION TECHNIQUES COULD HAVE BEEN IMPROVED?

	Total Responses	%
No suggestions for improvement	8	61.6
Would improve one or more aspects	5	38.4

Specific improvements suggested:

1. "Less Dramatic Music"
2. "More Forceful"
3. "Improve Sound"
4. "Interviews Strengthened"
5. "Strengthen Opening"

QUESTION NO. 5

HOW DOES THIS FILM COMPARE WITH SIMILAR PROGRAM MATERIAL FROM OTHER SOURCES?

NET	Total Responses	%
Better	1	7.7
As Good As	11	84.6
Worse	1	7.7

- - - - -

OTHER SOURCES (EEN, CEN, Commercial)	Total Responses	%
Better	2	15.4
As Good As	9	69.3
Worse	2*	15.4

- - - - -

	Total (26) Responses		%
GRAND TOTAL -- ALL COMPARISON:	BETTER	3	11.5
	AS GOOD AS	20	77.0
	WORSE	3	11.5

* Includes one comparison with CBS, one with Central Educational Network

QUESTION NO. 6

DOES THE FILM'S LENGTH INFLUENCE YOUR FEELINGS ABOUT RUNNING IT ON THE AIR?

	Total Responses	%
YES	7	53.9
NO	6	46.1

COMMENT:

"Would prefer either 14:30 or 29:30"

"Would be somewhat easier programming it at 28:50 or 29:30"

"Since its length is designed to allow for a local tie-in, we welcome shorter time."

QUESTION NO. 7

IN YOUR ESTIMATION, WILL THE NAME "ROBERT PRESTON" HAVE ANY BEARING IN PROMOTION -- CAN YOU EXPECT A SLIGHTLY LARGER AUDIENCE AS A RESULT?

	Total Responses	%
YES	7	53.9
NO	6	46.1

COMMENT:

"Preston is not that well known locally."

"Yes. A well-known actor draws a larger audience for us."

QUESTION NO. 8

IS THE FILM BROUGHT TO A SUITABLE SUMMARY AND CLOSE?

	Total Responses	%
Satisfactory	8	61.7
Would Improve	5	38.3

SUGGESTIONS FOR IMPROVEMENT:

"Could be a bit more frightening."

"Emphasize costs of halting air pollution in relation to total population."

"Strengthen the ending, make it more dynamic."

QUESTION NO. 9

IS THE SUBJECT OF AIR POLLUTION OF INTEREST LOCALLY?

	Total Responses	%
YES	8	61.7
NO	5	38.3

QUESTION NO. 10

IS THIS THE TYPE OF FILM YOU WOULD WANT TO REPEAT AGAIN DURING THE BROADCAST WEEK?

	Total Responses	%
YES	10	77.0
NO	3	23.0

ADDITIONAL RESPONSE

In addition to the responses tabulated above, one letter was submitted to the Evaluation Center. The letter was addressed to the Manager of the Topeka, Kansas ETV Outlet, KTWU, by the Director of the State of Kansas Department of Economic Development, who upon viewing the film found it "interesting, frightening and reasonably up-to-date."

ETV Personnel Evaluation -- A Summary

Perhaps the most qualified critical viewers for a documentary film are found among TV programming and production personnel. Such people are far more sensitive to camera technique, continuity, narration, editing and other production and "story" elements than the typical viewer. Further, they are called upon to test their judgment of a program's potential effectiveness with an audience on a continuing, day-to-day basis, and must make comparative judgments of the programming and production approaches of various kinds of material. Finally, because they are in most cases "creative" communicators themselves, their tastes and predilections often tend to build an unconscious bias against the ways in which others have treated material.

Within this critical framework, then, the evaluations of ETV station personnel outlined above offer a remarkable testimony to the quality of Beware The Wind. It is significant, for example, that nearly two-thirds of the respondents felt that the film required "no improvement" either in overall production or in the closing of the film, and that no more than one change was suggested by those who would "improve" the work. Equally commendatory is the fact that nearly 90 per cent of the respondents regarded the film "as good as" or "better" than all program material to which they are exposed.

In matters of general treatment of content material there is strong approval of approach. Nearly 85 per cent of respondents approved the "audience-holding" power of the film's opening, and the same percentage felt that pertinent factors in the subject material were "developed logically and smoothly" in the film. All respondents agreed that such specific content factors as the national spread of air pollution were conveyed effectively ("very well" -- 61.6 per cent, and "satisfactorily -- 38.4 per cent).

From the programming standpoint, there is equally positive evidence that the film is of high quality. A significant majority (77 per cent) of the respondents would program the film twice in a single week. Elements within the film which make it attractive to commercial programmers, however, do not seem consequential to their ETV counterparts. Indeed, in some cases the length is regarded as inconvenient for ETV programming. In the case of "star" value a majority of ETV respondents felt that Robert Preston's name would produce a larger audience, but opinion only slightly favors this view -- 53.9 per cent to 46.1 per cent.

The same divided opinion occurs in the matter of length, but is of greater consequence here because, while the "star" concept probably has no bearing upon the decision to air such films, length can -- and probably does -- influence airing decisions. We note that the "open-end" design deliberately allows for local involvement and also offers the commercial station an opportunity to "log" the program as local public service. The thrust of ETV-PTV programming, being heavily local, makes such logging of little consequence. Further (as noted above and in earlier studies) the need to "fill" the open time frequently works a hardship on low-budget ETV operations. In this regard, it is significant that two of the stations who responded to our initial inquiry but did not request a screening print were negative from the outset about their ability to produce even a short "open-end" segment in their own studios.

E.

THE DISSEMINATION MODE - SUMMARY AND RECOMMENDATIONS

It would appear that the effort to distribute such films as Beware The Wind through the ETV System is most worthwhile so long as ETV scheduling and airing does not conflict with commercial station telecasts. The "pick-up, spill-over and standby audiences" (described in earlier evaluations) are not entirely negligible, especially in relation to the costs of distribution.

In general, the practice of ETV dissemination should be continued, and the following efforts should be made to assure continuing positive response.

A) ETV STATIONS SHOULD BE OFFERED SUCH FILMS EITHER WITH THE "OPEN-END" TIME AVAILABLE TO THEM OR AS A SELF CONTAINED PACKAGE IN STANDARD LENGTHS OF 14:30 OR 29:00.

It is believed that the "open-end" potentiality is of little or no value to ETV stations. The evidence suggests a sharp increase in number of ETV stations that will clear prime time for such films if they do not have to trouble with studio production for an "open-end." It is advised that Airlie Productions devise a limited number of alternative short "endings", and attach them to the film. Such endings may take the form of "concluding remarks" by a well-known bio-medical specialist from each of four or five regions of the U. S. Thus ETV stations in Ohio, Illinois and Indiana might be sent a film running 29:00 in which the last 2:30 would feature remarks by a mid-western specialist. To be sure, the cost of filming four or five of these special endings may not be justified in terms of numbers of viewers projected for ETV dissemination -- but such an approach would positively increase already-heavy station interest.

8) EFFORT SHOULD BE INITIATED IN THE EXPLORATION OF WAYS IN WHICH ETV VIEWING RESPONSE (SMALL AUDIENCES OF SELECT VIEWERS) CAN BE TURNED TO POSITIVE ADVANTAGE IN SEEKING GREATER COMMUNITY INVOLVEMENT IN AIR-POLLUTION CONTROL.

Throughout the period of research, the investigative team has been impressed by the ease with which Beware The Wind can be scheduled into various community organization meetings -- where it has stimulated excellent response and led to further showings among other groups. In every case, we have observed a "captive-audience spillover" phenomenon. A member of a P.T.A. group saw the film at a P.T.A. meeting, and asked if he could show the film to the Booster's Club, of which he is also a member. An elementary teacher who attended the P.T.A. meeting asked permission to show it to all fourth-graders at her school. Indeed, the research team has reason to believe that more people in Syracuse, N. Y. saw the film in a captive-audience built by word-of-mouth than would see it when aired over the local ETV outlet.

This phenomenon raises some interesting questions regarding ETV dissemination. In a single example, if one 4th grade teacher who saw the film could arrange for a class-room showing of it to all 4th graders in her school, why could ITV not be used to show the film to all 4th graders in Syracuse?

It is certain that this aspect of dissemination has been overlooked in the testing measures taken to date. Future projects of this nature should allow for at least some preliminary investigation of routes of communication and modes of "enrichment" film selection within some existing ITV systems. It is entirely possible that the "massed" audience to be reached in this way could provide a valuable supplement to the "mass" audience now being reached through commercial TV and ETV-PTV.

PART II

THE IMPACT
OF
BEWARE THE
WIND

AN ANALYSIS OF
INFORMATION-IMPARTING AND
ATTITUDE-CHANGE
INDUCING CHARACTERISTICS

CONTENTS

PART II

A.

"Beware The Wind" As An Information Imparting Film

1. Introduction
2. Research Design
3. Description of the Study Groups
4. The Test Instrument
5. Test Results
6. Conclusions

B.

"Beware The Wind" As An Attitude-Influencing Film -- A Pilot Study

1. Introduction
2. Research Design
3. Description of the Study Group
4. The Test Instrument
5. Test Results
6. Conclusions

1.

INTRODUCTION

In earlier studies conducted for the Airlie Center, the research team developed and applied rough instruments which were designed to produce some knowledge of how successfully a specific documentary film could impart factual knowledge about the bio-medical subject under treatment. Results were reported for a pilot study conducted with *Leukemia: The Savage Cell* in 1968. The earlier results, however, were given only tentative interpretation simply because of various shortcomings in the design of the test-instrument as well as in other aspects of the research methodology. In the current studies, however, considerable effort has been made not only to increase the reliability of test-instruments and the size and range of sample viewing audiences, but to subject test-results to a more rigorous statistical analysis.

It would be misleading, of course, to say that there are not a number of drawbacks to the present approach. Time-frame and budgetary restrictions have, for example, still curtailed efforts to produce statistically-meaningful *in-home* indices of viewer reaction. While the reports on probable *numbers* of viewers for one of the test-films are included in the evaluation of ETV dissemination technique above, it has been impossible to execute any kind of coincidental or post viewing testing program which could assess information gain among viewers at home. This shortcoming has been recognized and accepted as inevitable by the Airlie Foundation. It should be established, therefore, that the value of the report which follows must be considered in light of a research framework limited to captive audiences who were readily accessible for members of the research team and who would not have to be reimbursed for their participation in the project.

These limitations made clear, it should next be emphasized that significant efforts were made to broaden the scope of the study in two key areas -- viewer characteristics and test-screening conditions. In the first area, adult groups outside the University setting were included in the sample for the first time. Second, in order to check results against the medium for which dissemination of the film was planned, groups within the University setting saw the test-films in both a conventional classroom screening situation and through a closed circuit TV system. The former extension allowed for comparison of viewer response between student and adult groups and the latter for comparison between the effectiveness of the film in two distinct media. It should be stressed that the comparative media approach also allowed for incidental comparison of color and black and white reception (the CC-TV System employed was monochrome) and such other incidental conditions of viewing as size of screen and the physical relationship of viewer to screen. These were not, however, treated as isolated variables in the test situation.

In summary, the results reported below must be received in light of the knowledge that the research team has been unable to measure response over a wide, general audience sample of people who viewed the film under the basic conditions for which it was made -- open-circuit, in-home television reception. Past research has demonstrated again and again that there is considerable difference between the total communications situation of the captive-audience and the in-home viewer. Psychological conditions of receptivity may vary in the extreme. Physical and technical conditions of observation also vary to a considerable degree, affecting pronounced changes in the viewer's socio-psychological frame of reference. The variable factors are multitudinous, and recognition of this condition is reflected not only in a great number of experimental studies, but in the opinions of such critical observers as former BBC-TV program controller Stuart Hood, who has written:

> "Television is in some ways an imperfect medium for communication. This is partly because the viewer's visual memory can play strange tricks. From a sequence of newsfilm, or from a documentary, it may retain some striking but irrelevant detail - a child's face in a crowd, a gesture, some distracting element. There is the danger that by appealing too often and too strongly to the viewer's sense of wonder we may blunt his perception and his ability to marvel at all. Everything has been seen. In a spurious way everything has been experienced. Again, information in itself is useless if it conveys nothing more than a jumble of discrete facts, disjecta membra, incoherent and unrelated".

Yet even while recognizing these limitations of televised communication, Hood can conclude:

> "There are some topics involving logical argument at a very high level which do not lend themselves to the simplifying process basic to mass communication. It is as if the medieval artist had been asked to illustrate in his sculpture or in a stained glass window not the simple teachings of the Church but the subtleties of dogma and doctrine. But with all these provisos it still remains clear that television can, in a democracy, perform an essential task in presenting the facts and the arguments which, if understood, allow a free citizen to understand what goes on around him and, if he wishes, to take political action".

Hood has posed the challenge of such communicative use of the medium. The testing approach and results reported herewith can at least provide some insight into the effectiveness of the communicative artifact, even though final judgment of that effectiveness under the specific conditions of in-home viewing cannot be rendered.

Organization Of This Section Of The Report

This evaluation of the film Beware The Wind is formed into five parts, the first comprising a segment which is a description of the research design. The second includes a description of the study groups. The third deals with the test instrument itself, explaining the rationale for determination of the questions contained therein. The fourth part describes the administration of the tests including test dates, viewing conditions, and other pertinent data. Section five is reserved for test results. Here the analysis of the research data are analyzed in terms of descriptive statistics. The concluding section attempts to draw conclusions from the pertinent data, statistical measures, and the informal, candid reactions of each testing group.

RESEARCH DESIGN

Our primary concern in this phase of the study was with the success of *Beware The Wind* in presentation of specific facts to a given viewer. The film was reviewed in several screening sessions by the researchers, who attempted to determine the potential effect which it would have upon the test groups to be selected. Since it was decided that the major thrust of the investigation would be to determine the cognitive information gain in each of the test situations, this cognitive information was established, and a suitable test developed. (See Research Instrument, below).

Potential student learning groups at the undergraduate and graduate levels of the S. I. Newhouse Communications Center of Syracuse University, Syracuse, New York, were selected to review the potential reviewing groups. This discipline was selected simply on the basis that students in this Center had constant exposure to current expression in the mass media, and would tend to be more sensitive to the nature of the documentary form.

A group of 34 undergraduates enrolled in Television-Radio course #345, *Writing and Announcing for Radio-Television*, were selected. They were administered a pre-test prior to the showing of the film, and a post-test immediately following actual screening. The film was to be shown to them in a conventional classroom, on a film screen, in color. A second group, composed of 23 graduate students enrolled in Television-Radio course #555 (titled *Studio Operations*) were shown the film under similar conditions -- in a darkened classroom on a front screen and in color. These students were also given a pre-test and a post-test. A third group of 32 television students, all under-graduates enrolled in a course in television production, were shown the film as part of a two-hour closed circuit lecture on monochrome television. They, like the two preceeding groups, were given a pre-test and a post-test.

It was also decided that a fourth group should be tested -- in this instance the members of the Parent Teachers Association, Main Street School in North Syracuse, New York. Parents who attended this evening session were given a pre-test and a post-test at the conclusion of the screening. An informal session was held at the conclusion of the post-test in order to elicit additional impact information. A secretary was on hand to record the reactions of the group.

DESCRIPTION OF THE STUDY GROUPS

Research Group I

This group of 34 undergraduate students in Writing and Announcing for Television met one day a week for one hour in a lecture situation and two days a week for one hour in a laboratory situation. On the test date, the students were administered the pre-test upon arrival and without any explanation as to its purpose. The film was then shown without comment. At the conclusion of the film, another set of tests were distributed and each student completed a second form.

In this group there were 21 males and 13 females. (See table 4 for percentage breakdown). Over 60 per cent of the students are television radio majors. Slightly under 10 per cent were public address majors, and the rest of the group was comprised of drama, political science, zoology, journalism, English, advertising, French and engineering majors. The students were told that the tests which had been administered were designed to check the amount of information that could be learned from viewing this particular film. It was explained that in any presentation there is certain factual material which can impress an audience, and that the researchers were interested in the impact of this film upon this particular audience.

Research Group II

This group of 23 graduate students enrolled in the television radio department Studio Operations course meets one day a week for two hours in a lecture situation and one day a week for three hours of laboratory work in the television studio. All of the students in this group are majoring in the television department. The film was shown to this group on a morning when only one hour of lecture was to be given. After a break, the students returned and were handed a pre-test. They were then shown the film and given a post-test. A similar explanation was given to this group as was given to group I. The group was comprised of 17 males and 6 females. (See percentage breakdown by sex in Table 5). The screening and testing went without incident or interruption.

Research Group III

This group of 32 undergraduate students enrolled in a course in Television Production, meets once a week for a two-hour lecture session on closed-circuit monochrome television and once a week for a three hour laboratory session in the television studio. The group is comprised of 22 male students and 10 female students. In the second hour of a two hour lecture on the uses of film on television, they were instructed to complete the pre-test. The film then followed, broadcast through the closed-circuit monochrome system. At the conclusion of the film, the students were requested to complete the post-test. Of the 10 females in the group, 90 per cent were Television-Radio majors and 10 per cent were Advertising majors. In the group of males, 22 in number, slightly over 80 per cent were Television-Radio majors, less than 5 per cent were Public Relations majors, and almost 14 per cent were Advertising majors. (See the percentage breakdown by sex in Table 6). The pre-test film showing and post-test went without incident. An explanation similar to what was given to groups I and II, was also given to this group.

Research Group IV

Arrangements were made with the Main Street Parent-Teachers Group for a showing and testing of the film, Beware The Wind. In a flyer released a week before the meeting, emphasis was placed on the film as a "sneak preview" of a television documentary -- hopefully to interest a large group attendance. On the night of presentation, 48 parents and faculty were in attendance. After a short business meeting, the researcher was introduced and he explained the general purpose of the evening. The 48 people in attendance completed the pre-test and were shown the film in color on a large front screen. (See percentage breakdown by sex in Table 7) At the conclusion of the film, the post tests were distributed and completed without incident. The atmosphere was relaxed and informal, and a brief question and answer session with the participants followed. A secretary made notes of the reactions of the audience. The group comprised 43 females and 5 males.

Explanation of Other Tables

Table 1 reflects the percentage breakdown by sex for the total survey population (N = 148). Females number 78 or 52.7% of the population; males number 70 or 47.3%. A percentage breakdown of females in the combined survey groups is indicated in table 2. A similar breakdown for male percentages is given in table 3.

Table 8 reflects the percentages of males and females in the combined groups who viewed the film in color on a large front screen. Here the total N equals 105. Table 9 indicates the sex breakdown in group III who viewed the film on closed-circuit monochrome television. Also of interest here is the percentage breakdown in the number of subjects tested in an academic situation as compared to those tested in the PTA meeting. See Table 10 for this information.

While the major investigation in this study is to determine cognitive information gain as determined by the comparison of pre and post-test data, a small sub-group of survey group four were administered a post-test only. These were eleven persons who arrived too late for the pre-test, but early enough to see the complete showing of the test film. A percentage breakdown by sex is indicated in Table 11. Table 12 compares the number of males and females in the pre and post-test situation with those in the post-test only.

The research design is indicated in Table 13. Here the groups are specified by number and sex breakdown together with the treatment given. This table forms a summary of the testing situations.

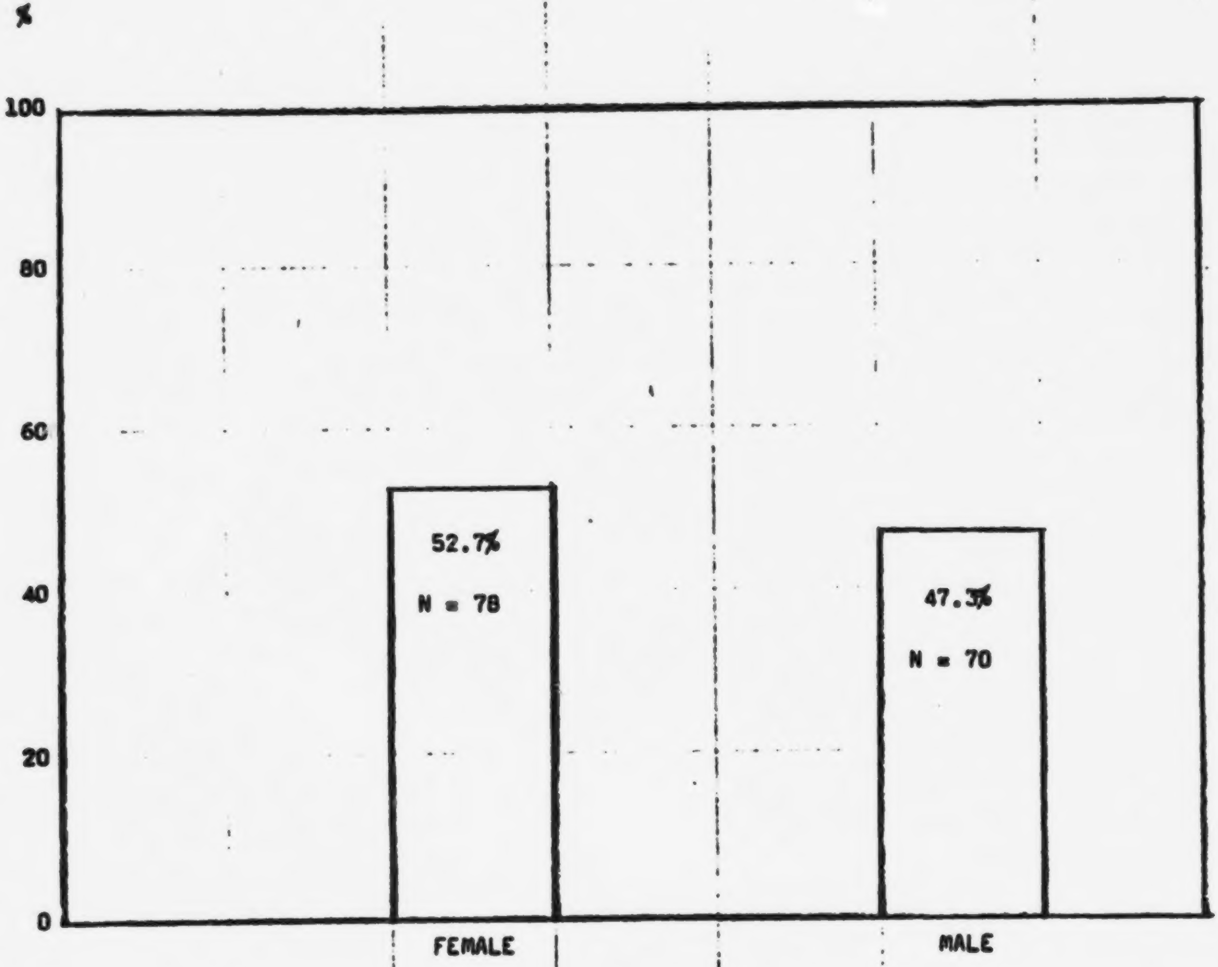


TABLE 1

PERCENT MALE AND FEMALE IN SURVEY N = 148

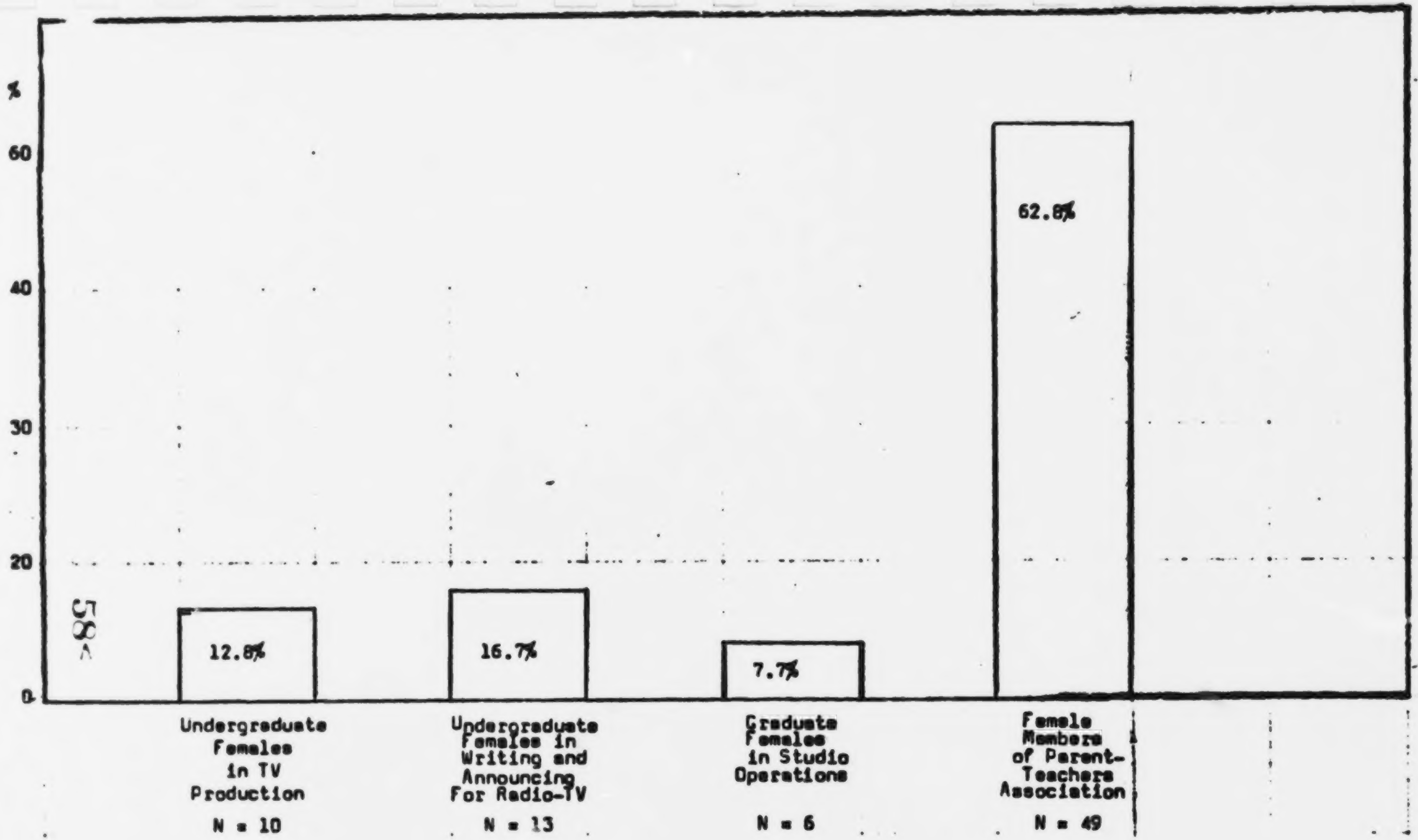


TABLE 2

PERCENTAGE BREAKDOWN OF FEMALES IN THE SURVEY BY GROUPS N = 78

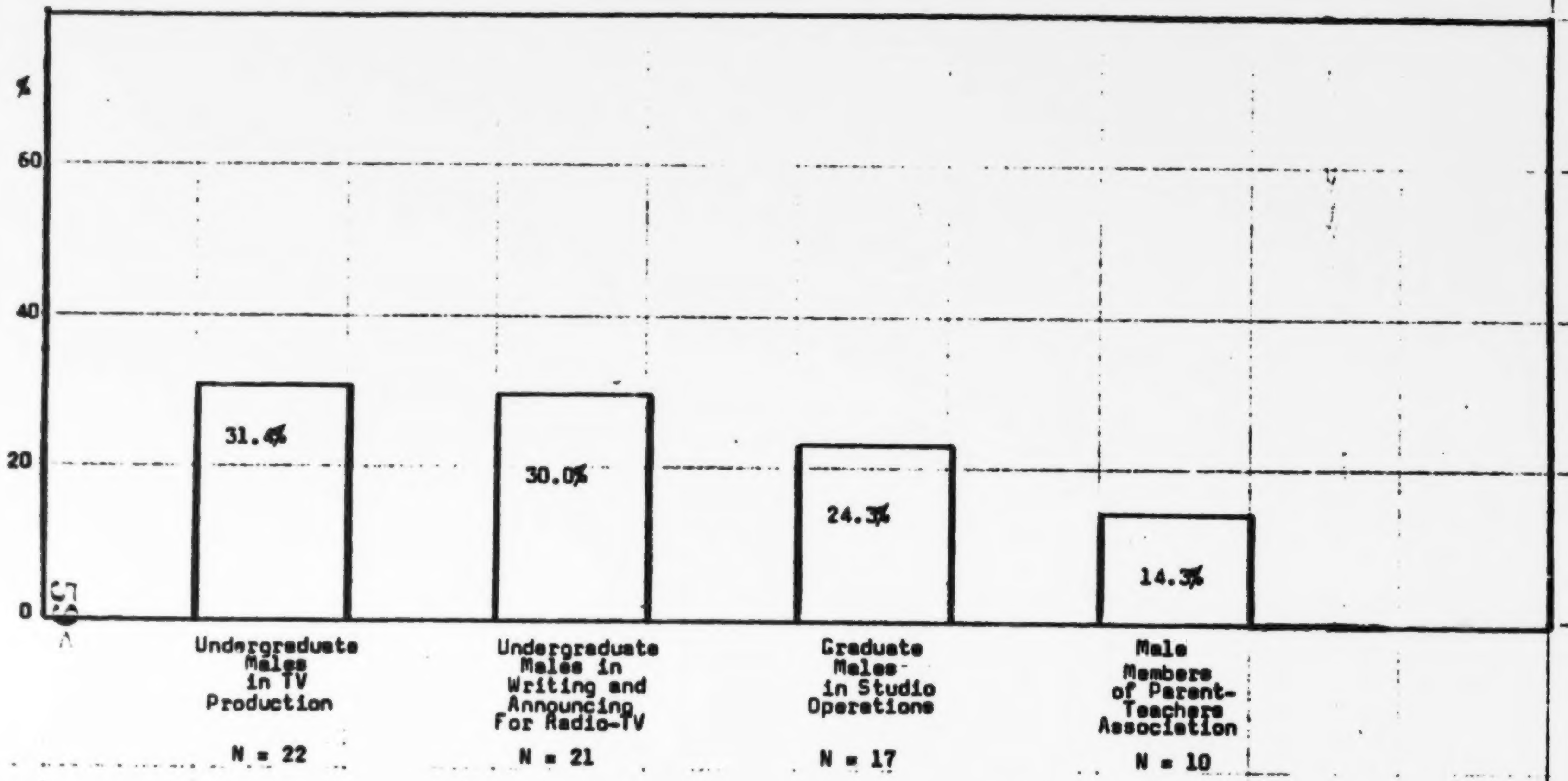


TABLE 3

PERCENTAGE BREAKDOWN OF MALES IN THE SURVEY BY GROUPS N = 70

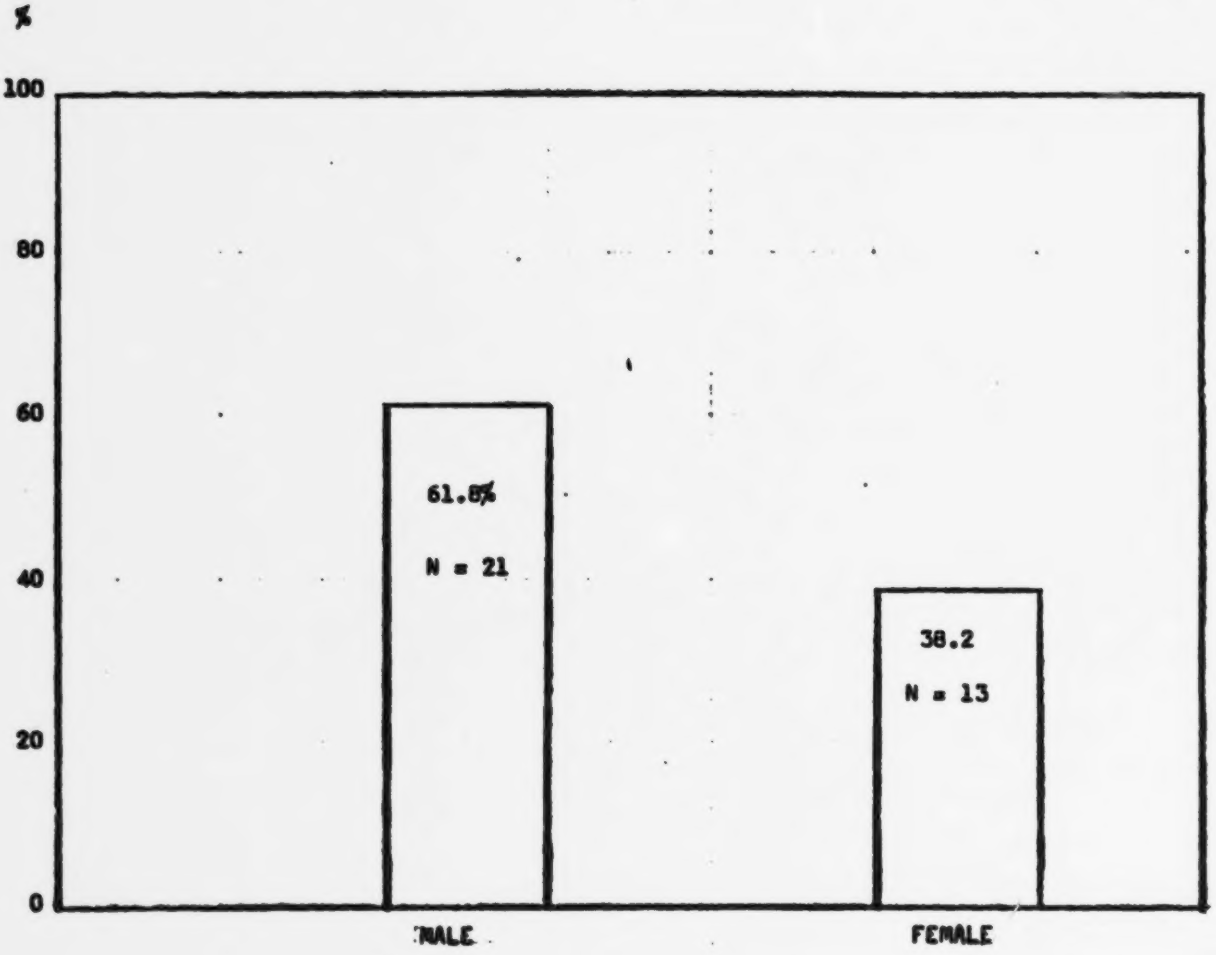


TABLE 4

COMPOSITION BY SEX IN GROUP ONE N = 34

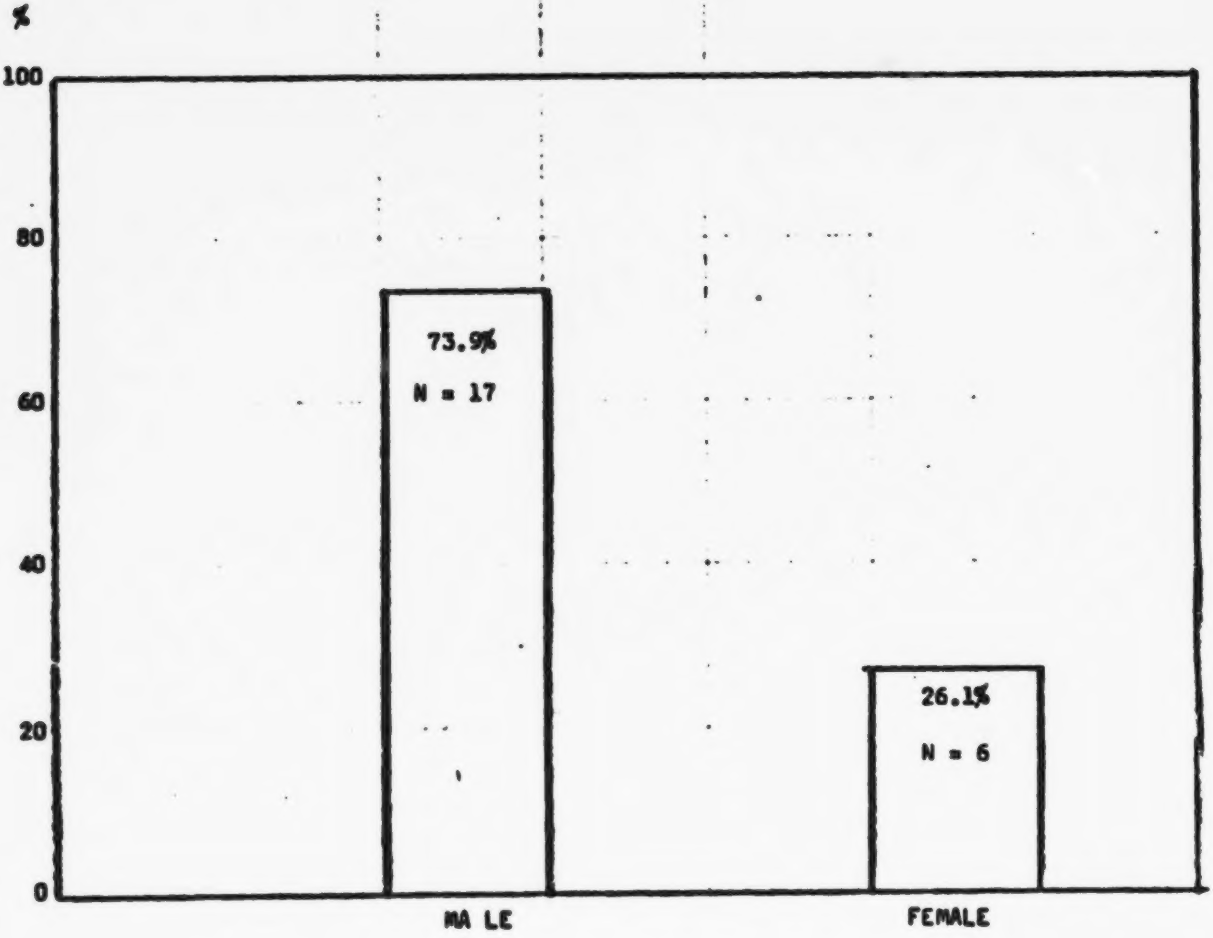


TABLE 5

COMPOSITION BY SEX IN GROUP TWO N = 23

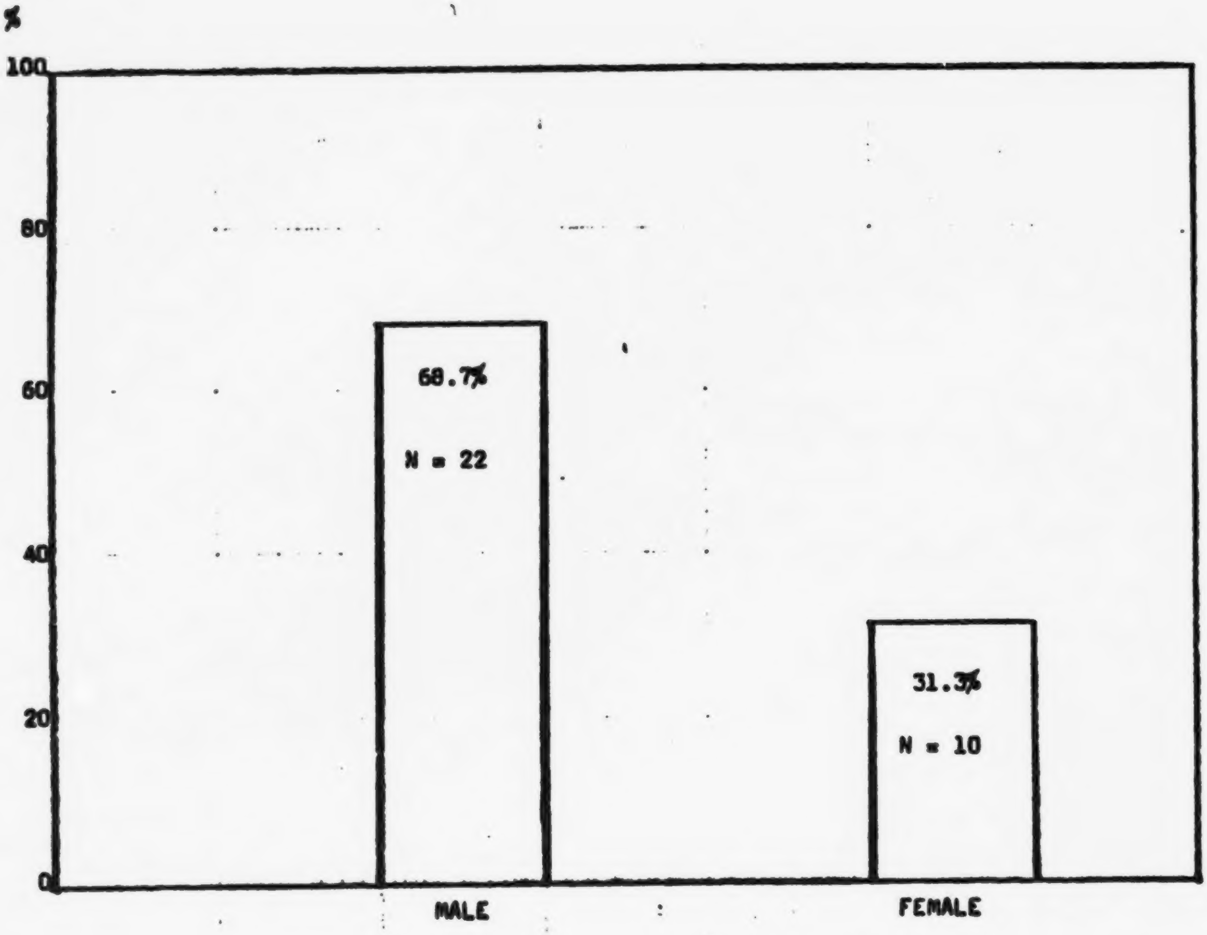


TABLE 6

COMPOSITION BY SEX IN GROUP THREE   N = 32

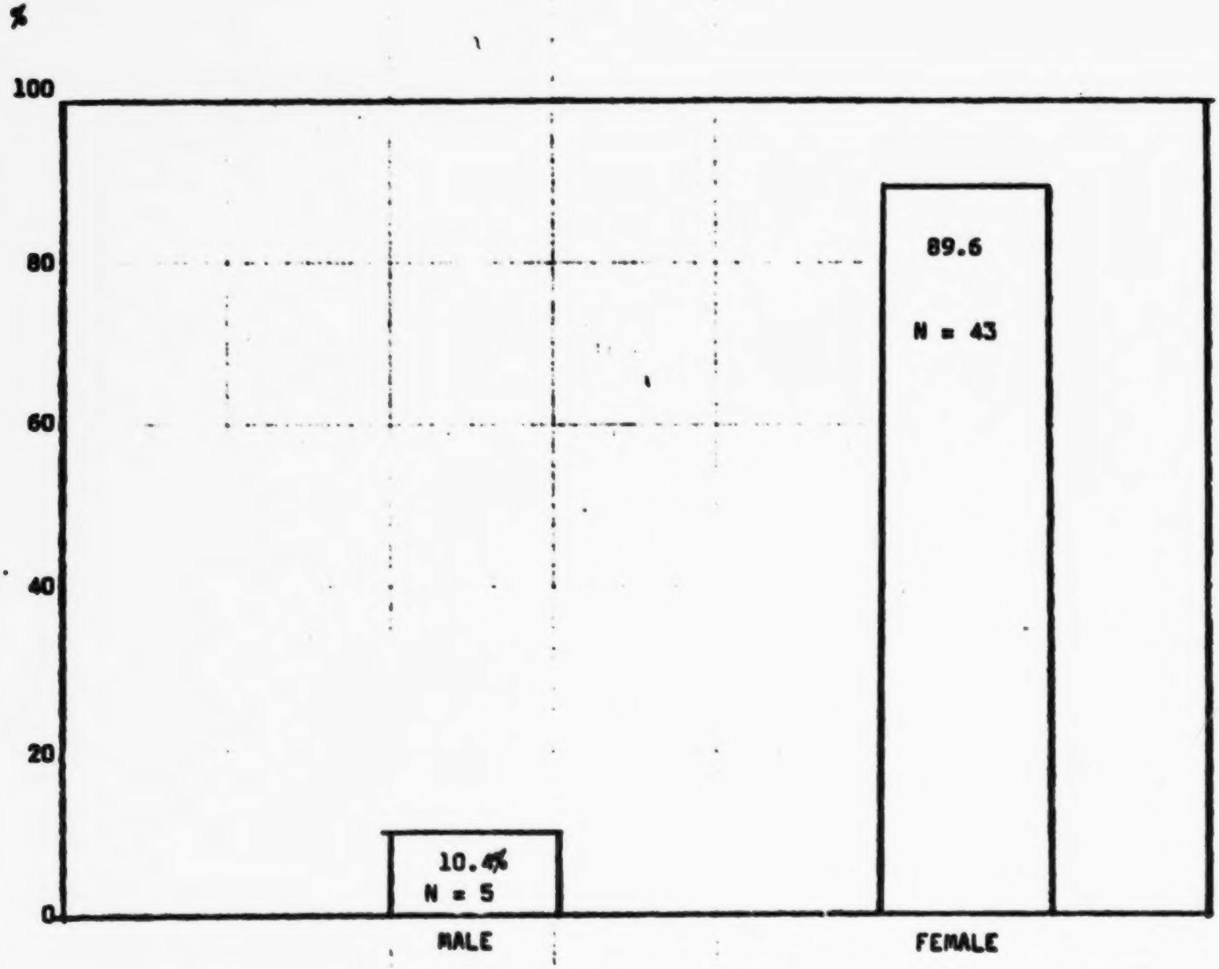


TABLE 7

COMPOSITION BY SEX IN GROUP FOUR N = 48

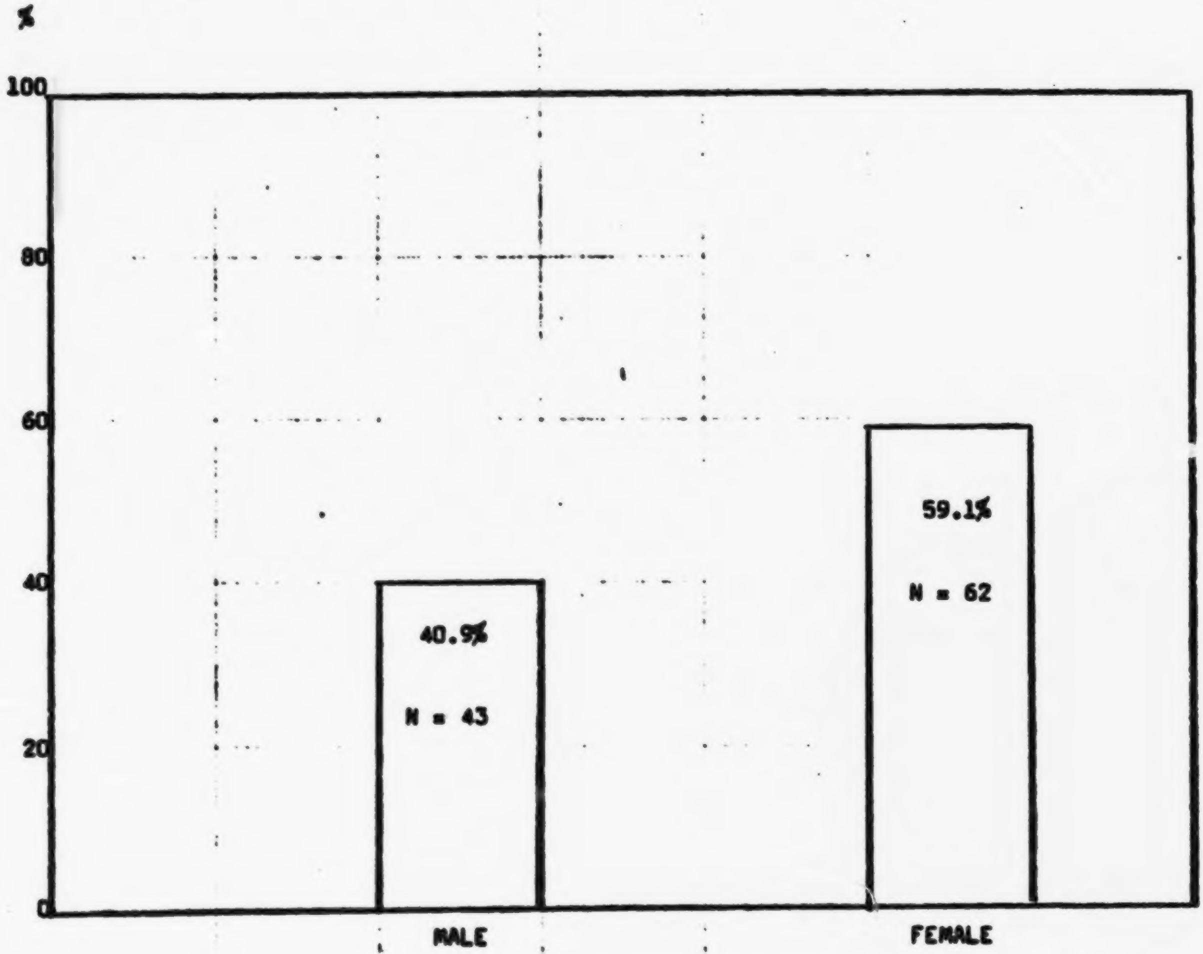


TABLE 8

COMPOSITION BY SEX OF COMBINED GROUPS
VIEWING IN COLOR, IN PERSON N = 105

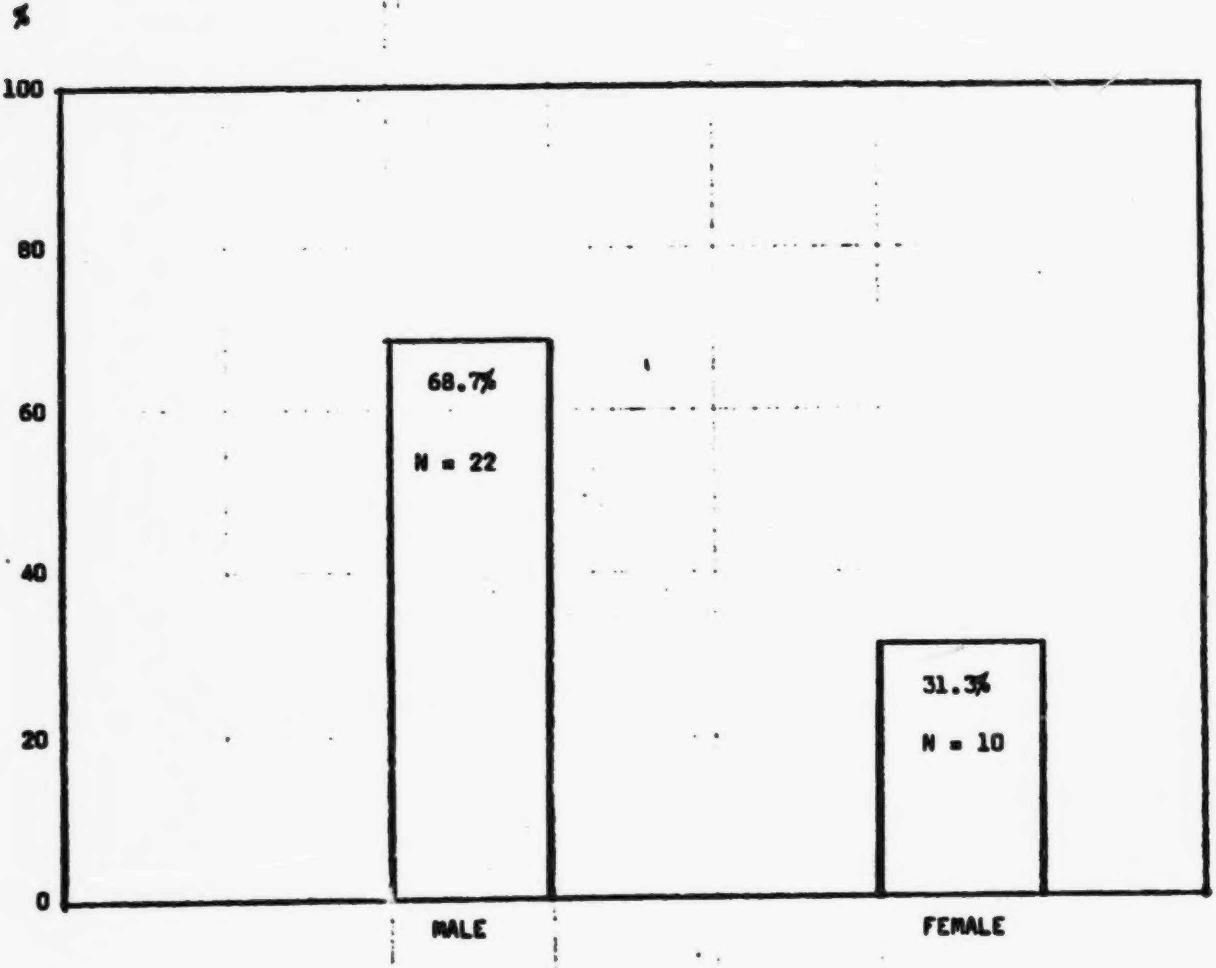


TABLE 9

COMPARISON BY SEX OF GROUP THREE WATCHING
IN MONOCHROME ON CCTV N = 32

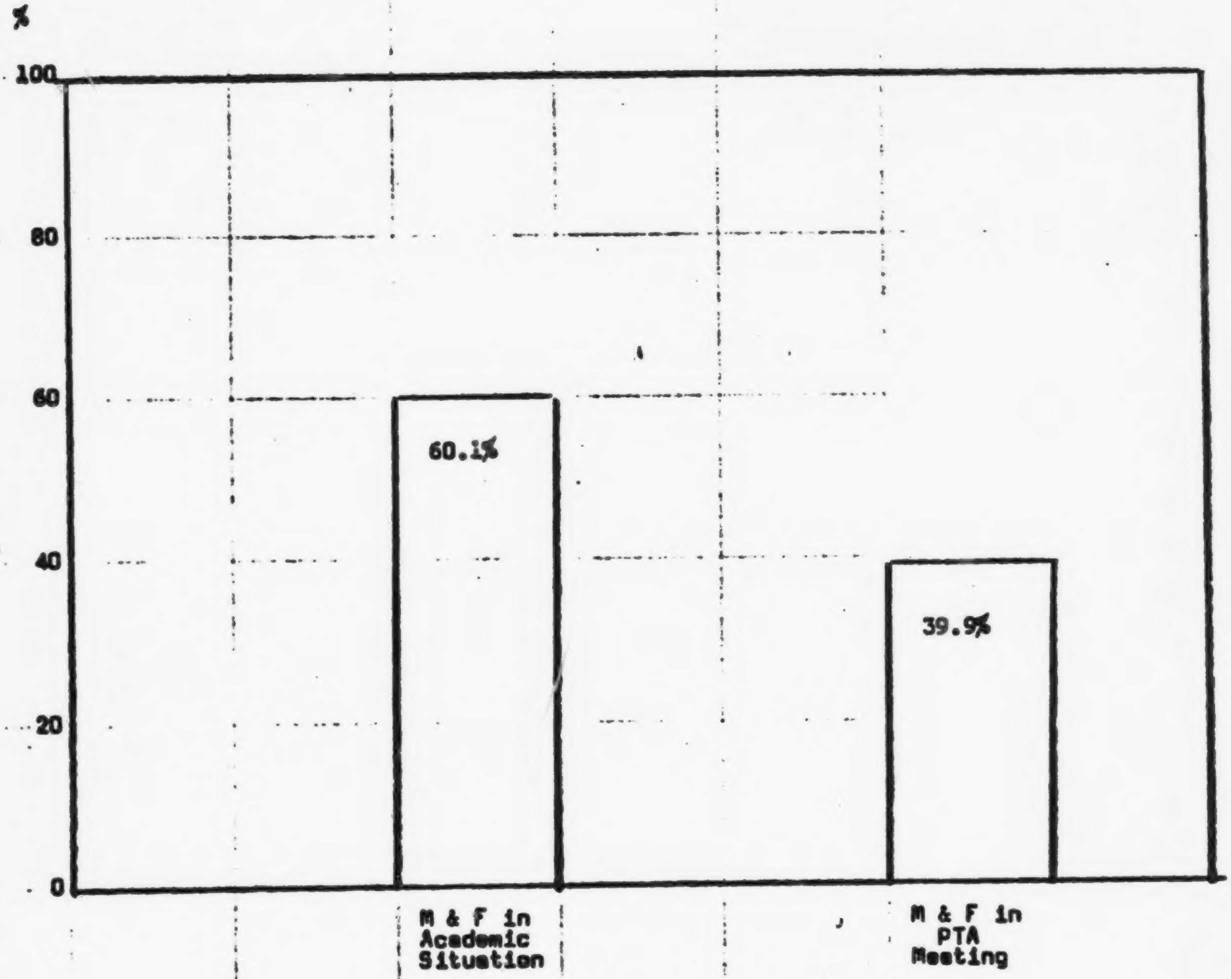


TABLE 10

COMPARISON OF SUBJECTS IN ACADEMIC SITUATION AND PTA MEETING

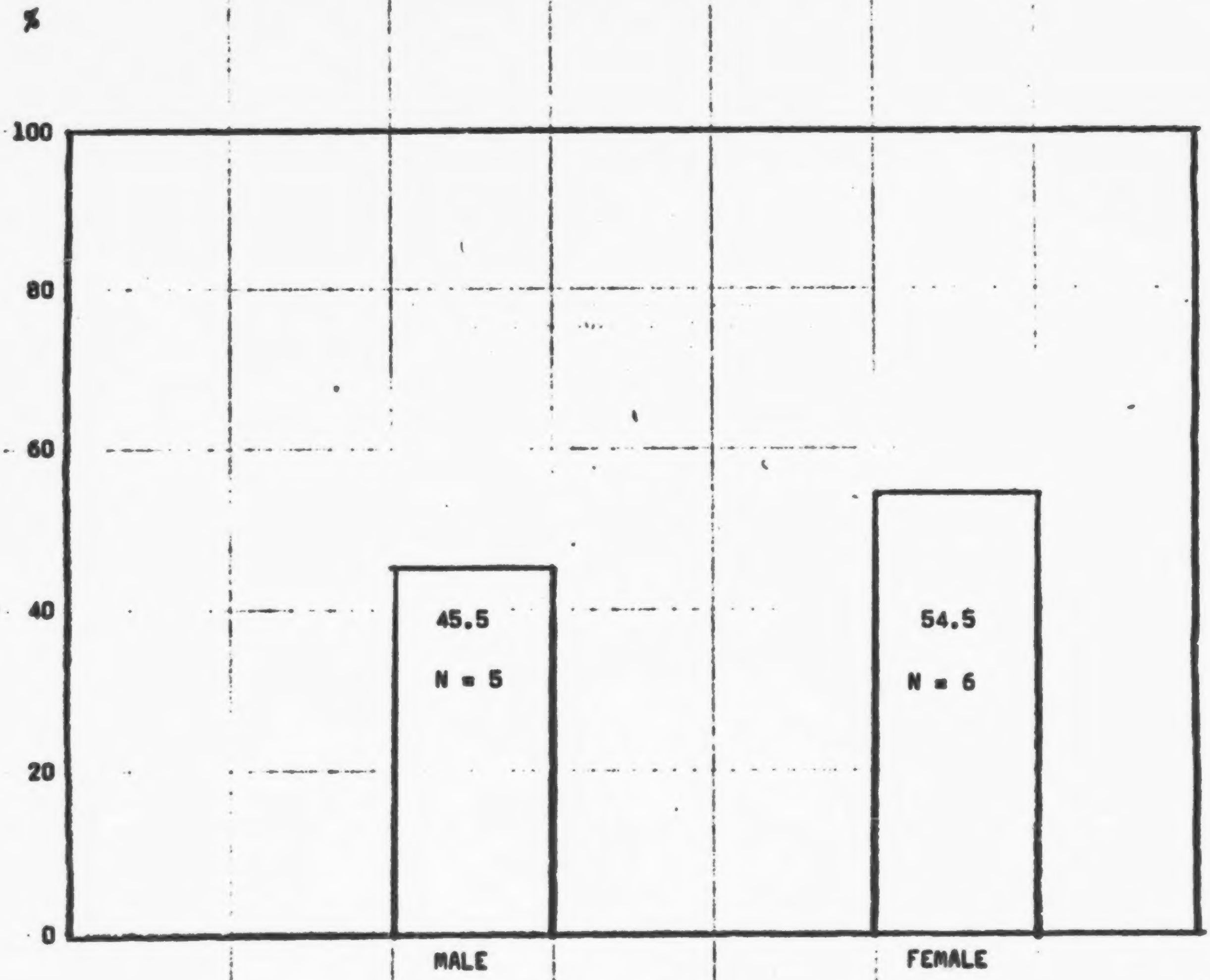


TABLE 11

COMPARISON MALE AND FEMALE IN GROUP
FOUR IN POST-TEST ONLY N = 11

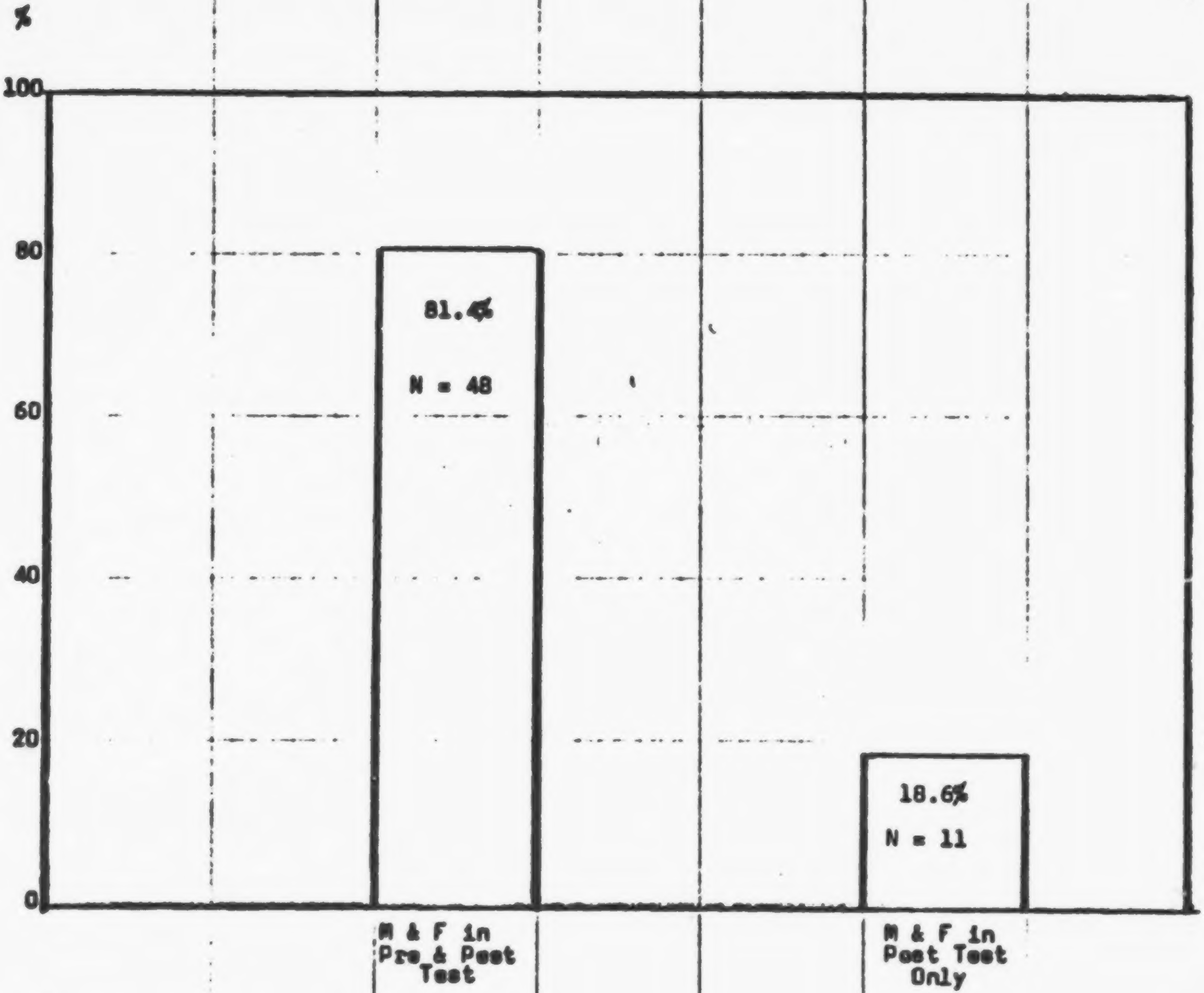


TABLE 12

COMPARISON OF SUB-GROUPS IN GROUP FOUR N = 59

GROUP			TREATMENT			
	Pre & Post Test Shown on Screen In Color		Pre & Post Test Shown on CCTV In Monochrome		Post Test Only Shown on Screen In Color	
1. Undergraduates in Writing and announcing for Radio TV N = 34	M = 21	F = 13	-	-	-	-
2. Graduate Students in Studio Operations Course in TV N = 23	M = 17	F = 6	-	-	-	-
3. Undergraduates in Television Production Course N = 32	-	-	M = 22	F = 10	-	-
4. Parent Teachers Association Group N = 48	M = 5	F = 43	-	-	-	-
Subgroup - PTA N = 11	-	-	-	-	M = 5	F = 6

TABLE 13

PARTICIPANTS IN EACH STUDY GROUP
BY SEX AND TREATMENT

4.

THE TEST INSTRUMENT

The film Beware The Wind was screened five times by the research team, and extensive notes on the cognitive information contained therein were taken. This material was then adapted into multiple choice questions. These questions were formed, the distractors were chosen and then ranked in random order on the testing instrument. (See Sample Test at end of this section). Each of the distractors was arranged in a random order as a possible answer. Eleven questions were finally chosen from the material presented in the film. These eleven questions represented the major thrust of the presentation -- information which, in the opinion of the researchers, was clearly summarized or explained within the film. It was felt that each of the questions selected had major relevance to a testing of cognitive information gain.

Question 1 is related to the city with the greatest concentration of automobiles. The point was clearly established that Washington, D. C. had the greatest concentration of automobiles in the country. Other major cities were chosen as possible distractors in this question, including New York, Chicago, Los Angeles and Denver. A rather strong point regarding automobiles wasting fuel was also included in the film, and the question related to it worded in such a way as to reflect the presentation in the film -- "perfectly-tuned automobile engines waste which of the following percentages of fuel burned in them?" The correct answer was 2%, and distractors were built from figures around that particular percentage. Early in the film, a voice of a pilot indicates that he has seen air pollution as high as 35,000 feet. Since most people tend to think of air pollution as a ground level phenomenon, it was decided that this particular bit of knowledge could be checked with the question: "Smoke has been known to rise to which of the following heights?" Distractors were then given in ascending order from 5,000 feet to 35,000 feet.

Mention is also made early in the film of the amount of poisonous material which is released into our atmosphere each year. The correct response to this question was 150,000,000 tons, and again, figures around that tonnage were indicated as possible distractors. In a sequence in the film describing pollution problems in Los Angeles and Alaska, there was an indication that because of geophysical and atmospheric conditions, air pollutants remained close to the ground. A question dealing with air pollutants was composed, and respondents were asked to choose the distractor which described the movement of air pollutants.

In another hard-hitting sequence describing bumper-to-bumper traffic, the automobile "in front of you" was described as "pumping four times the maximum safe level of carbon monoxide into your car." Here, distractors were again chosen about the "four times" figure. In a later segment of the film, the narrator described photochemicals poisonous to plants. One in particular was mentioned, and became the correct answer to this question: "Which one of the following is a photochemical poisonous to plants?" Other chemicals were selected as possible distractors. These included sodium monoxide, carbonic gas, esters and fluoride.

A rather strong point was made of the effect of air pollution on animal joints with a graphic depiction of a hobbled animal. Question #8 dealt with this topic, asking which one of the following is affected by air pollution: "Animal joints, dogs' lungs, bird feathers, snake skin, fish bones?" In a sequence filmed in Europe, the point was made that air pollution has done more damage to public monuments since 1900 than in the hundreds of years preceding that date. This information was fashioned into question #9 and distractors chosen from dates around 1900. In the latter third of the film, graphic visual demonstrations were arranged to illustrate that pollutants from industrial smokestacks could be removed before discharge into the open air. It was pointed out that this method was expensive, but that it could be accomplished by electrostatic precipitation. Here, distractors were chosen as being similar to, or at least sounding similar to, this process. They included endocarthic separation, electronic regulation, flostronic treatment and wet spray dampening. The concluding question, #11, focuses upon the fact that Phoenix, Arizona is second in the nation in concentration of smoke and dust in the air. Distractors were chosen from cities close to metropolitan areas which might be thought of as having smog or pollution problems. These included New Haven, Pittsburgh, St. Louis and Houston.

M F

INVENTORY-MED*T

Name ____________________

Major ____________________

1. Which of the following cities has the greatest concentration of automobiles?
   1. New York 2. Chicago 3. Los Agneles 4. Washington 5. Denver

2. Perfectly tuned automobiles waste which of the following percentages of fuel burned in them?

   1. .5% 2. 1% 3. 2% 4. 5% 5. 16%

3. Smoke has been known to rise to which of the following heights?
   1. 5,000 feet 2. 15,000 feet 3. 20,000 feet 4. 30,000 feet 5. 35,000 feeet

4. Each year which amount of poisonous material is released into the atmosphere?
   1. 1000 tons 2. 130,000,000 tons 3. 150,000,000 tons 4. 270,000,000 tons
   5. 136,000 tons

5. Air pollutants always:
   1. rise as they cool 2. always rise 3. sink 4. remain suspended in upper layers
   5. rise as the air warms

6 In bumper to bumper traffic the car ahead of you pumps how many times the maximum safe level of carbon monoxide into your car?
   1. 2 times 2. 3 times 3. 4 times 4. 6 times 5. 10 times

7. Which one of the following photochemicals is poisonous to plants?
   1. sodium monoxide 2. carbonic gas 3. esters 4. fluoride 5. ozone

8. Which one of the following is seriously effected by air pollution?
   1. animal joints 2. dog lungs 3. bird feathers 4. snake skins
   5. bone disease in fish

9. More damage has been done to public monuments by air pollution since which date, than in the hundreds of years prior to it?
   1. 1850 2. 1875 3.1900 4. 1925 5. 1935

10. Which one of the following will remove 98% of the pollutants from industrial smoke?
    1. endo-cardic separation 2. electrostatic precipitation
    3. electronic regulation 4. fluoritronic treatment 5. wet spray dampening

11. Which city is second in the nation in concentration of smoke and dust in the air?
    1. Phoenix 2. New Haven 3. Pittsburgh 4. St. Louis 5. Houston

Test Administration

The tests were administered to the five research groups between October 16, 1968 and January 7, 1969. The first testing was held on October 16, 1968, with the 34 members of the undergraduate class in Writing and Announcing for Television-Radio. All three sections of this course saw the film under normal circumstances in the Radio Studio C in the WAER building on the Syracuse University campus. This is a comfortable sound-proofed room adaptable to the showing of motion pictures. A verbal check was made at the beginning of the second and third hours to make sure none of the students in these sections had talked to any previous session. Only those students present on the October 16th date were included in the study.

Research Group 2 (the 23 graduate students in the Television-Radio Studio Operations course) were administered the pre and post-test on January 7, 1969. The class met in Room 204 of Archbold Gymnasium, a converted classroom, to view the film. The room is equipped with closed circuit television receivers and facilities for showing motion pictures.

Research Group 3 (the 32 members of the Television Production course) were administered the pre and post-tests on November 6, 1968, in Room 108 of the Main Library and adjacent to the Television Center. This room, too, has been converted for closed-circuit television transmission, and can be considered a large-group instruction room.

It should be pointed out here that the students in Research Group 3 were the only ones not under the direct supervision of the researcher.

These sections are monitored by a group of graduate assistants, and instructions for the program were given by the researcher on closed circuit television. Reports from the monitors indicate that no problems arose.

Research Group 4 (the Parent Teachers Association of Main Street Elementary School) was tested and saw the presentation on November 4, 1968. Arrangements for the presentation were made with the Program Chairman of the Main Street School, a Mrs. Terry. She had been very receptive to the idea of this presentation, and in fact convinced her group to postpone a program on sex education that this program might be held in November. At the conclusion of the testing, the program committee had arranged for a short panel discussion by members of the local air pollution control center, including a Mr. Sterling of the Onondaga County Environmental Control Center and Dr. William Compton, Associate Research Scientist with the Life Science Division of the Syracuse University Research Corporation. In addition to these short presentations, the assemblage also heard from the Mayor of North Syracuse, Mr. Walker Wheeler, who expressed his delight in having a film of this nature in the schools. Dr. Compton of the Syracuse University Research Corporation applauded the film presentation, and has since requested that the film be made available to him for use with other groups -- local, county and even state-wide.

5.

TEST RESULTS

At the conclusion of the period in which the test groups 1 to 4 were administered their specific treatments, an analysis of the data, employing descriptive statistics, was initiated. The two following tables indicate the range of scores in the distribution of scores for each test group. Table 14 was set up to indicate the distribution of raw scores by test group and sex for the pre-test only. Table 15 gives a similar distribution of raw scores for each test group in the post-test only. These two tables form the basis for the ensuing statistical description of the range, median and means of all test scores.

TEST RESULTS

Number Correct

Test Group	0	1	2	3	4	5	6	7	8	9	10	11
1 Female	3	3	4	-	3	-	-	-	-	-	-	-
1 Male	2	8	6	3	2	-	-	-	-	-	-	-
2 Female	0	4	1	1	-	-	-	-	-	-	-	-
2 Male	-	6	3	5	3	-	-	-	-	-	-	-
3 Female	1	5	-	-	2	-	2	-	-	-	-	-
3 Male	-	2	3	4	2	3	4	1	3	-	-	-
4 Female	11	7	15	8	1	1	-	-	-	-	-	-
4 Male	-	3	1	-	-	1	-	-	-	-	-	-

TABLE 14

Distribution of Raw Scores by Test Group & Sex

Pre-Test Only

TEST RESULTS

Number Correct

Test Group	0	1	2	3	4	5	6	7	8	9	10	11
1 Female	-	-	-	-	-	-	-	2	3	6	2	-
1 Male	-	-	-	-	-	-	-	2	4	10	5	-
2 Female	-	-	-	-	-	-	1	-	1	4	-	-
2 Male	-	-	-	-	1	1	1	1	2	6	3	2
3 Female	-	-	-	-	-	-	-	1	3	4	1	1
3 Male	-	-	-	-	-	-	-	2	8	10	2	-
4 Female	-	-	-	-	-	3	-	5	10	20	5	-
4 Male	-	-	-	-	-	-	-	1	1	3	-	-
Subgroup 4												
Female	-	-	-	-	-	1	1	2	1	1	-	-
Male	-	-	-	-	-	-	1	-	1	1	1	1

TABLE 15

Distribution of Raw Scores by Test Group & Sex

Pre-Test Only

Explanation of Tables: Range of Scores

Table 16 indicates the range of scores for the females in group 1, the undergraduates studying Announcing and Writing for Television Radio. The females in this group indicate a range on the pre-test of 4 and a range of 3 on the post-test. Table 17 indicates the range of scores for the males in group 1. Here, too, the range is 4 in the pre-test and 3 in the post-test. In each case, male and female, the range as a measure of dispersion is of a lesser magnitude in the post-test.

Table 18 indicates the range of scores for the females in group 2; the graduate students enrolled in the Studio Operations course at Syracuse University. The range of scores for the females was 2 for the pre-test and 3 for the post-test. Males indicate, in Table 19, a range of 3 for the pre-test and a range of 7 in the post test.

Table 20 indicates the range of scores for females in group 3. Group 3 are the students in the course, Television Production. Their range in pre-test is 6; in post-test, 4. Table 21 indicates the range of scores for males, group 3. Here, a range in the pre-test is 7; in the post-test, 3. In both post-tests, male and female, the range of scores has decreased over the pre-test.

Table 22 indicates the range of scores for the females in group 4. This is the group of females in the Parent-Teachers Association Group at Main Street School, North Syracuse, New York. Their range in the pre-test was 4. The range in the post-test was 5. Table 23 indicates the range of scores for the males in this same Parent Teachers Association Group. Their pre-test range was 4; their post-test range was 2. Here is a situation in which the dispersion increased in the post-test by one degree, while in the male group dispersion was halved.

Table 24 indicates the range of scores in sub-group 4. These were people who were administered the post-test only. The females had a range of 4; the males, a range of 5. The range for females in the post-test only, decreased by 1 over the females taking both the pre and post-tests. Males, however, increased by 3 points. Those taking the pre and post-test had a range of 2 in the post-test, and those taking the post-test only, had a range of 5.

Table 25 indicates a comparison of range for all females, groups 1 through 4 in the pre-test. Here we find the least dispersion in test group 2 -- the Graduate Studio Operations females -- with a range of 2. Second was test group 1, whose range was 4. This was followed by test group 4, whose range was 5, and finally by the Television Production undergraduates with a range of 6.

Table 26 is a comparison of range for males, group 1 through 4, in the pre-test only. Here, group 2 had the least dispersion with a range of 3; group 1 was second with a range of 4. The male members of the Parent-Teachers Association group in group 4 was third with a range of 4; and the Television Production subjects had a range of 7.

A comparison of range is made in table 27 for the females, groups 1 through 4 in the post-test only. Here, groups 1 and 2 tie with a range of 3; group 3 is second with a range of 4, tied with sub-group 4 with a range of 4, and fourth is the fourth group with a range of 5.

Table 28 is a comparison of range for males, groups 1 through 4 in the post-test. The males here, in group 4, although small in number, had the least dispersion of scores with a range of 2. Groups 1 and 3 were second with a range of 3, followed by the males in sub-group 4 with a range of 5 and test group 2 with a range of 7.

It can be said here that, generally, the range of scores in the pre-test for both males and females had a higher degree of dispersion than in the post-test. Certain variances from this conclusion may have resulted from other treatment effects not identified at this time.

Explanation of Tables: Median of Scores

The median score for each group was then computed. The median of a distribution is defined as a value such that half of the scores in the distribution are larger and half are smaller than that value. Table 16 indicates a median score for the females in group 1 as 2 in the pre-test and 9 in the post-test. The median here is increased 7 points, reflecting the treatment effect of the film. The males in this group, as indicated in table 17, have a median score of 2 in the pre-test and a median score of 9 in the post-test; again, an increase of 7 points.

In table 18, the median is computed for females in group 2. The median score here is 1 in the pre-test and 9 in the post-test -- an increase of 8 points. For males in this same group, the median on the pre-test was 2, the median on the post-test 9 -- an increase of 7 points. In group 3, the median score was 1 in the pre-test; 9 in the post-test. These females had an increase of 8 points. For males in this same group, the median score in the pre-test was 4; the median score in the post-test was 9, an increase of 5 points.

The females in group 4 indicated a median score of 2 in the pre-test, 9 in the post-test - an increase of 7. Males in the same group indicate a median score of 1 in the pre-test, a median score of 9 in the post-test - an increase of 8 points.

The median scores for females taking the post-test was 7. The median score for males taking the post-test only was 9. This compares favorably with the median scores for those taking both the pre-test and the post-test. Among the males taking the post-test only, 9 (the median score) is an increase over all other males taking or subjected to the pre and post-test situation.

Explanation of Tables: Means of Scores

Next, the arithmetic mean was calculated for the males and females in each group. The mean is a familiar index of central tendency for a set of raw data or distribution. It is represented by the formula

$$M = \frac{\text{Sigma } X_i}{n} .$$

Here, X_i stands for the score of the Observation labelled i, and the sum is taken over all of the different observations $_i$.

Table 29 indicates the means for the females and males in each of the test groups 1 through 4 in the pre-test only. Grand means are also indicated for each test group combining the male and female means into a pre-test grand mean. Other grand means have been found for all females in all test groups and all males in all test groups 1 through 4.

Table 30 is identical to table 29, except that it indicates the means and grand means in the post-test situation only. The summary grand mean in the pre-test situetion for all males and females in all four test groups indicates a means score of 2.22 correct answers. In the post-test situation, under similar circumstances, the mean score is 8.42 correct responses. This represents an over-all increase of 6.2 correct responses for all males and females in each of the four test groups when comparing the pre-test to the post-test. This reflects an increase in the number of items correct on each test after exposure to the film BEWARE THE WIND.

Table 31 indicates grand means for academic and non-academic viewers for the pre-test only. Here, the groups are separated as an indicator of variance and dispersion between academically oriented students and the non-academic group from the community. Here, the mean for females in the pre-test was 1.86 correct responses and 1.63 responses for the P.T.A. Group test group 4. The males in test groups 1, 2 and 3 had a mean score of 2.83 while the males in the P.T.A. Group had a mean of 2.00. In both these cases, the academic group had slightly higher mean scores, but they are deemed not significant.

Table 32 indicates grand means for academic and non-academic viewers in the post-test situation only. The academic females had a mean score of 8.58 while the P.T.A. females in group 4 had a mean of 8.37. The males in groups 1, 2 and 3 had a mean score of 8.61. The males in the P.T.A. group had a mean of 8.40. Again, here the mean scores of the academic group are slightly higher than those for the P.T.A. group, but they are judged not significant differences.

An interesting situation arises upon studying the sub-group 4 males and females administered the post-test only, where females have a mean score of 7.00 and the males, 8.80. Here, the males in the post-test situation only scored higher than the males administered both the pre and post-test.

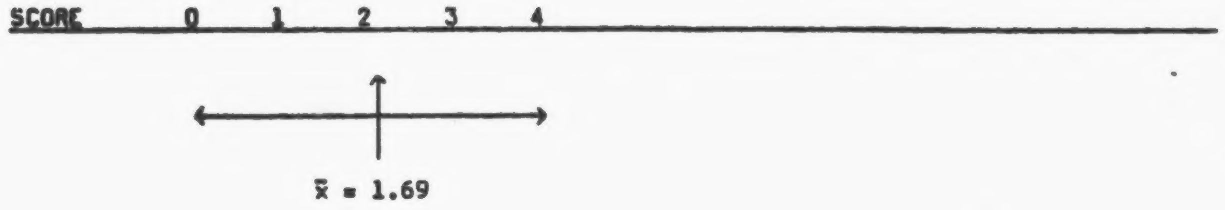
In conclusion, in the study of means and differences between means, it can be said that the males and females in test group 1 increased their score by 6.99, or almost 7 correct answers. In group 2 the males and females in the pre-test situation had a mean score of 1.90 correct answers and in the post-test, 8.40 - an increase of 6.50 correct answers. Group 3 had a similar increase in the magnitude of 5.25 correct answers. The P.T.A. Group, group 4, had a similar increase. The males and females in the pre-test situation having a mean score of 1.82 while in the post-test they scored an 8.15, an increase of 6.33 correct answers.

Summary

In summary and review, it can be generalized that the range of scores decreased with the administration of the post-test. This occurred for both the male and female portions of the population.

It can also be said that the median score for both males and females in each population group increased significantly and can be attributed to cognitive information gained through viewing the film BEWARE THE WIND. The mean scores increased between 5.25 and 6.99 correct responses in the post-test situation, again indicating cognitive information gain through the film viewing.

PRE-TEST



Range = 0 - 4 Correct (R = 4)
Average Score = 1.69
Median Score = 2
N = 13

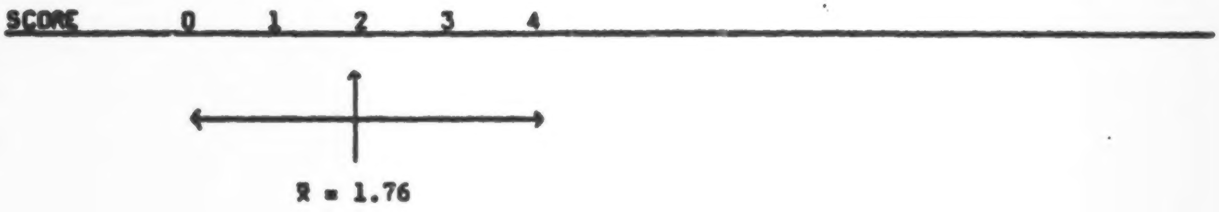
POST-TEST

Range = 7 - 10 Correct (R = 3)
Average Score = 8.62
Median Score = 9
N = 13

TABLE 16

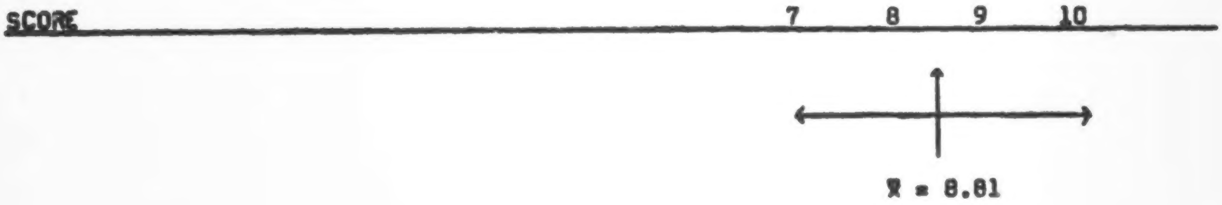
Range of Scores, Average, & Median Scores
For Females, Group One.

PRE-TEST



Range = 0 - 4 Correct (R = 4)
Average Score = 1.76
Median Score = 2
N = 21

POST-TEST

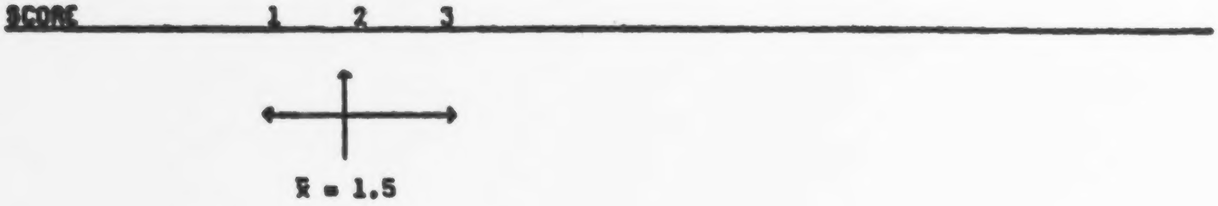


Range = 7 - 10 Correct (R = 3)
Average Score = 8.81
Median Score = 9
N = 21

TABLE 17

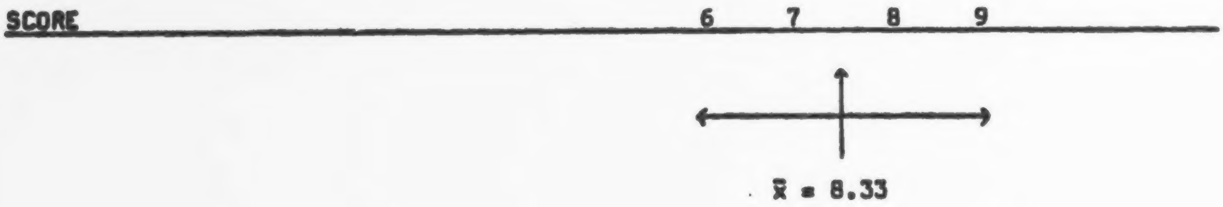
Range of Scores, Average, & Median Scores
For Males, Group One.

PRE-TEST



Range = 1 - 3 Correct (R = 2)
Averagw Score = 1.5
Median Score = 1
N = 6

POST-TEST

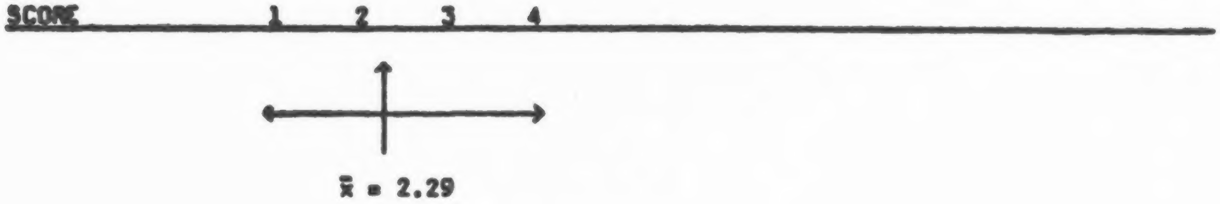


Range = 6 - 9 Correct (R = 3)
Average Score = 8.33
Median Score = 9
N = 6

TABLE 18

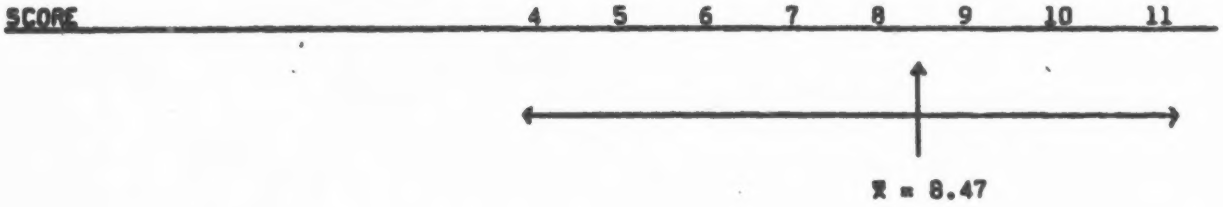
Range of Scores, Average, & Median Scores
For Females, Group Two.

PRE-TEST



Range = 1 - 4 Correct (R = 3)
Average Score = 2.29
Median Score = 2
N = 17

POST-TEST

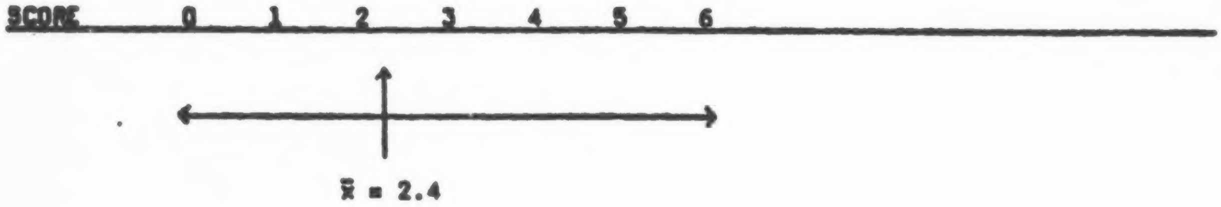


Range = 4 - 11 Correct (R = 7)
Average Score = 8.47
Median Score = 9
N = 17

TABLE 19

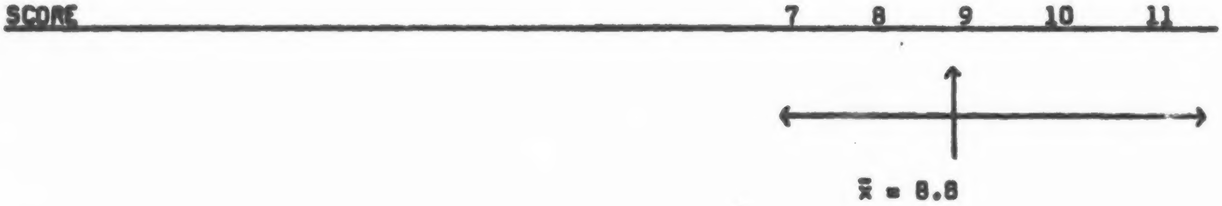
Range of Scores, Average, & Median Scores
For Males, Group Two.

PRE-TEST



Range = 0 - 6 Correct (R = 6)
Average Score = 2.4
Median Score = 1
N = 10

POST-TEST

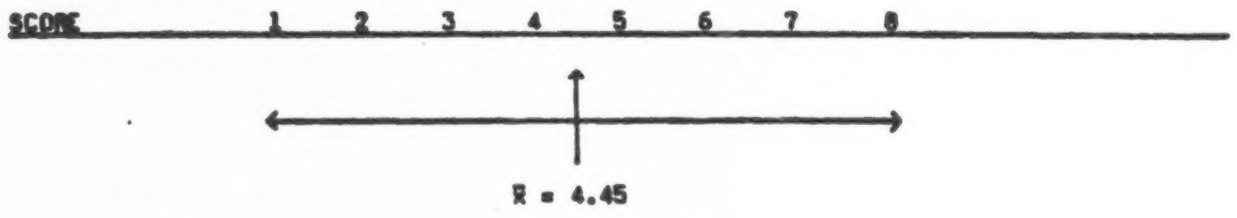


Range = 7 - 11 Correct (R = 4)
Average Score = 8.8
Median Score = 9
N = 10

TABLE 20

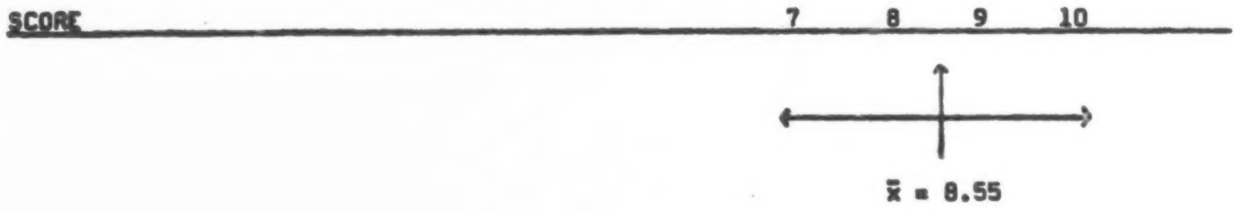
Range of Scores, Average, & Median Scores
For _Females_, Group Three.

PRE-TEST



Range = 1 - 8 Correct (R = 7)
Average Score = 4.45
Median Score = 4
N = 22

POST-TEST

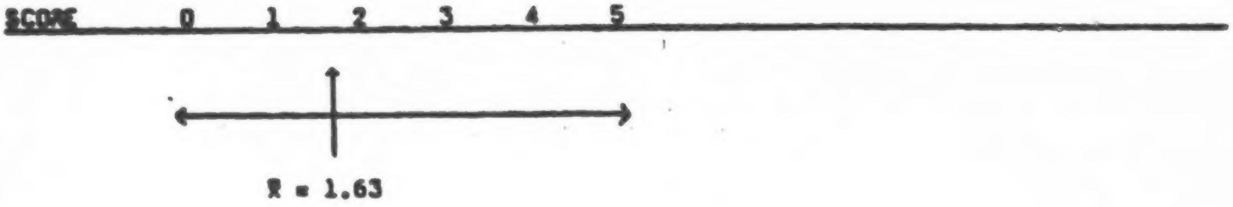


Range = 7 - 10 Correct (R = 3)
Average Score = 8.55
Median Score = 9
N = 22

TABLE 21

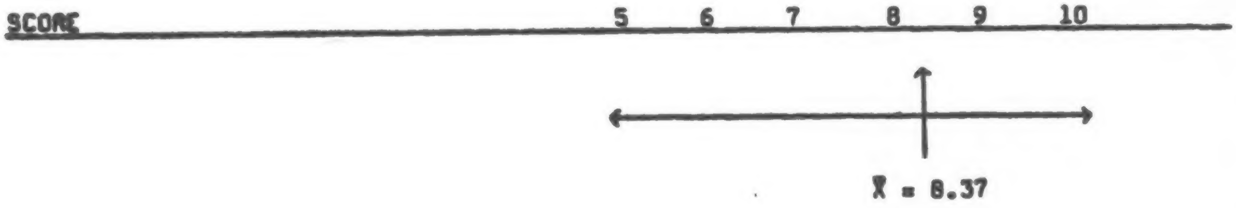
Range of Scores, Average, & Median Scores
For **Males**, Group Three

PRE-TEST



Range = 0 - 5 Correct (R = 4)
Average Score = 1.63
Median Score = 2
N = 43

POST-TEST

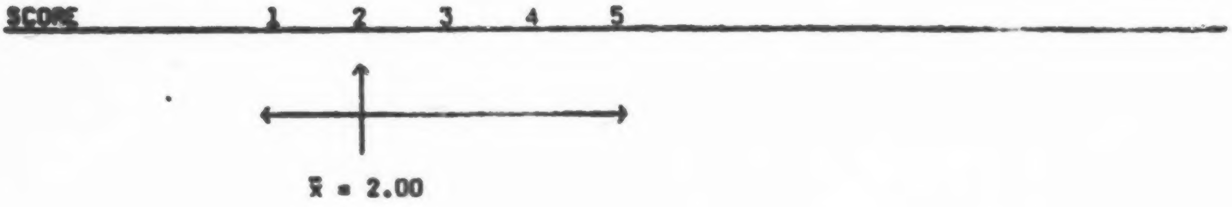


Range = 5 - 10 Correct (R = 5)
Average Score = 8.37
Median Score = 9
N = 43

TABLE 22

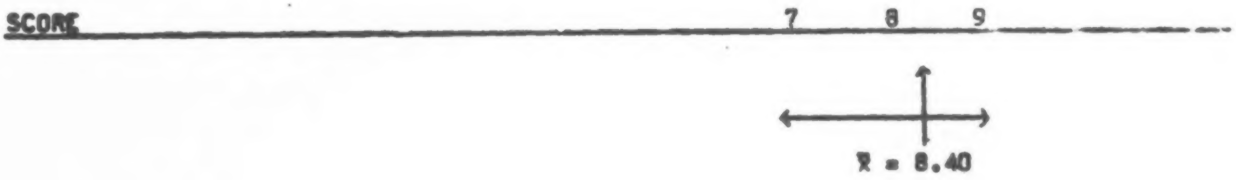
Range of Scores, Average, & Median Scores
For Females, Group Four

PRE-TEST



Range = 1 - 5 Correct (R = 4)
Average Score = 2.00
Median Score = 1
N = 5

POST-TEST

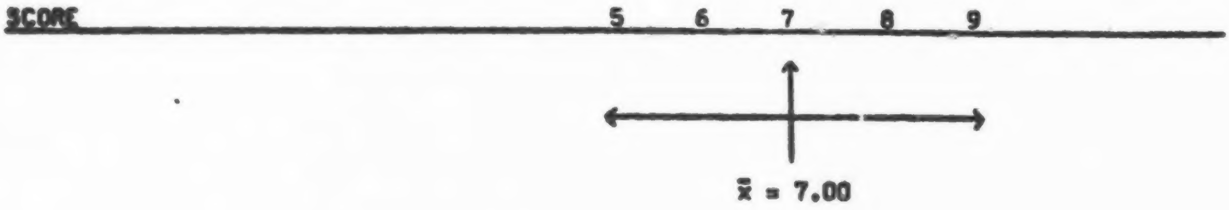


Range = 7 - 9 Correct (R = 2)
Average Score = 8.40
Median Score = 9
N = 5

TABLE 23

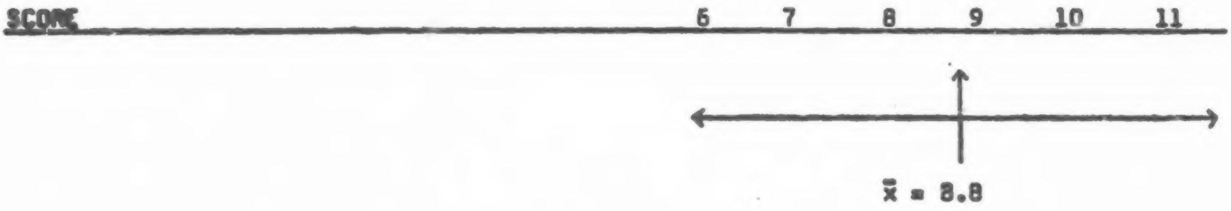
Range of Scores, Average, & Median Scores
For *Males*, Group Four

FEMALES, POST-TEST ONLY



Range = 5 - 9 Correct (R = 4)
Average Score = 7.00
Median Score = 7
N = 6

MALES, POST-TEST ONLY



Range = 6 - 11 Correct (R = 5)
Average Score = 8.8
Median Score = 9
N = 5

TABLE 24

Range of Scores, Average, & Median Scores
For Males & Females, Subgroup Four
Taking Post-Test Only

RANGE

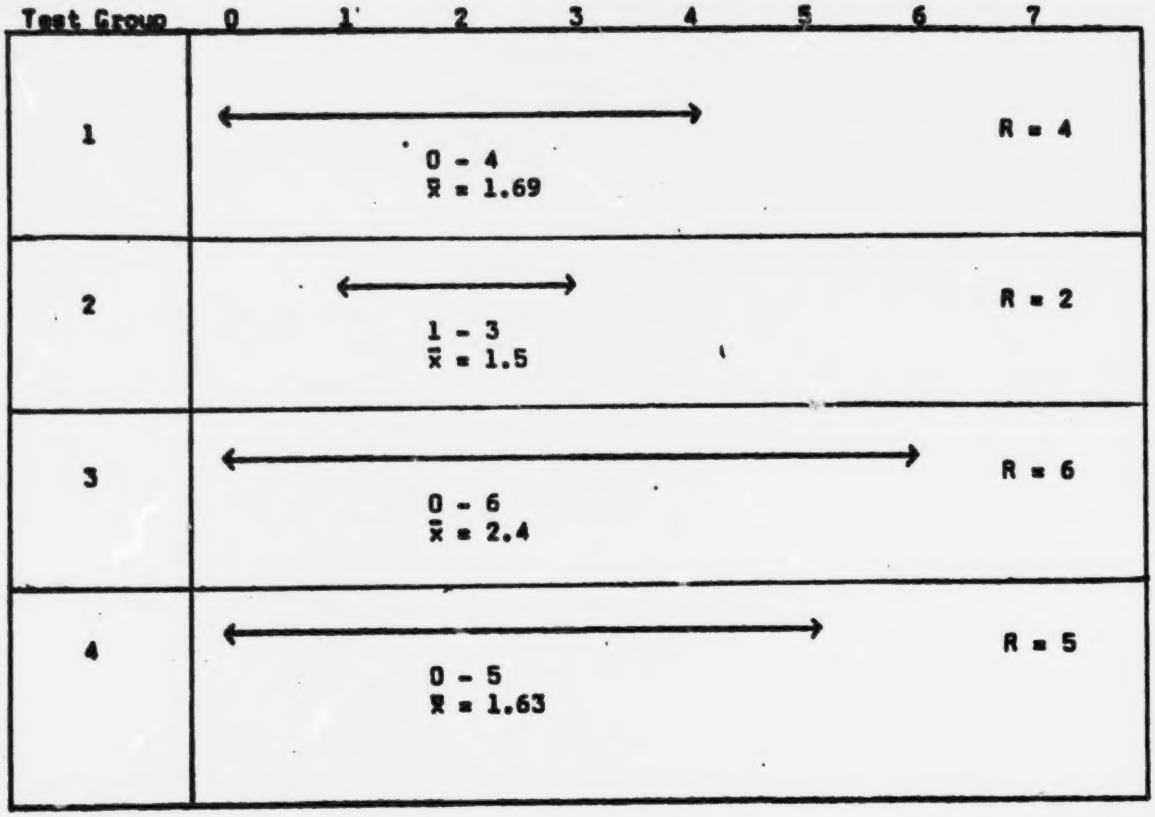


TABLE 25

Comparison of Range for _Females_,

Groups One Through Four, _Pre-Test_

RANGE

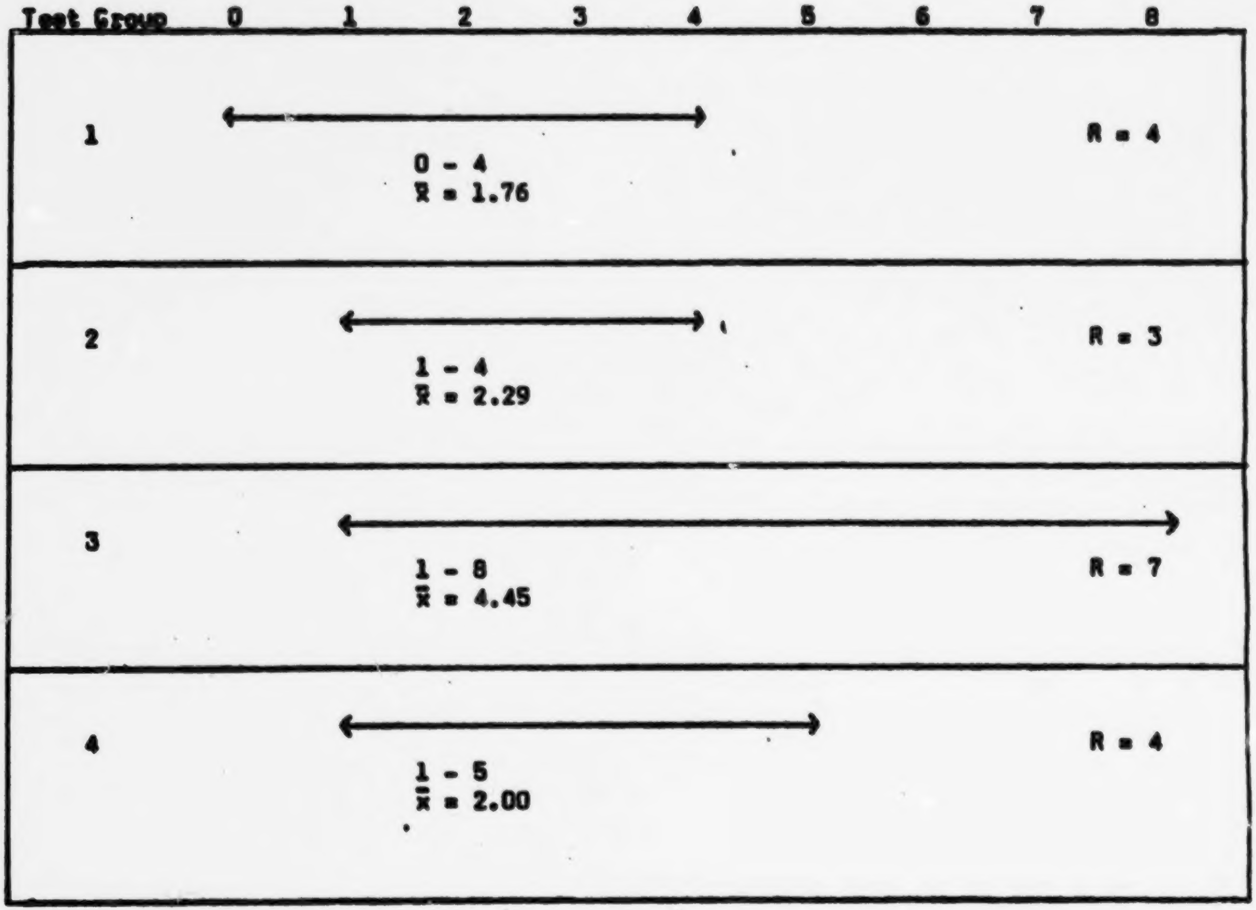


TABLE 26

Comparison of Range for *Males*,

Groups One Through Four, *Pre-Test*

RANGE

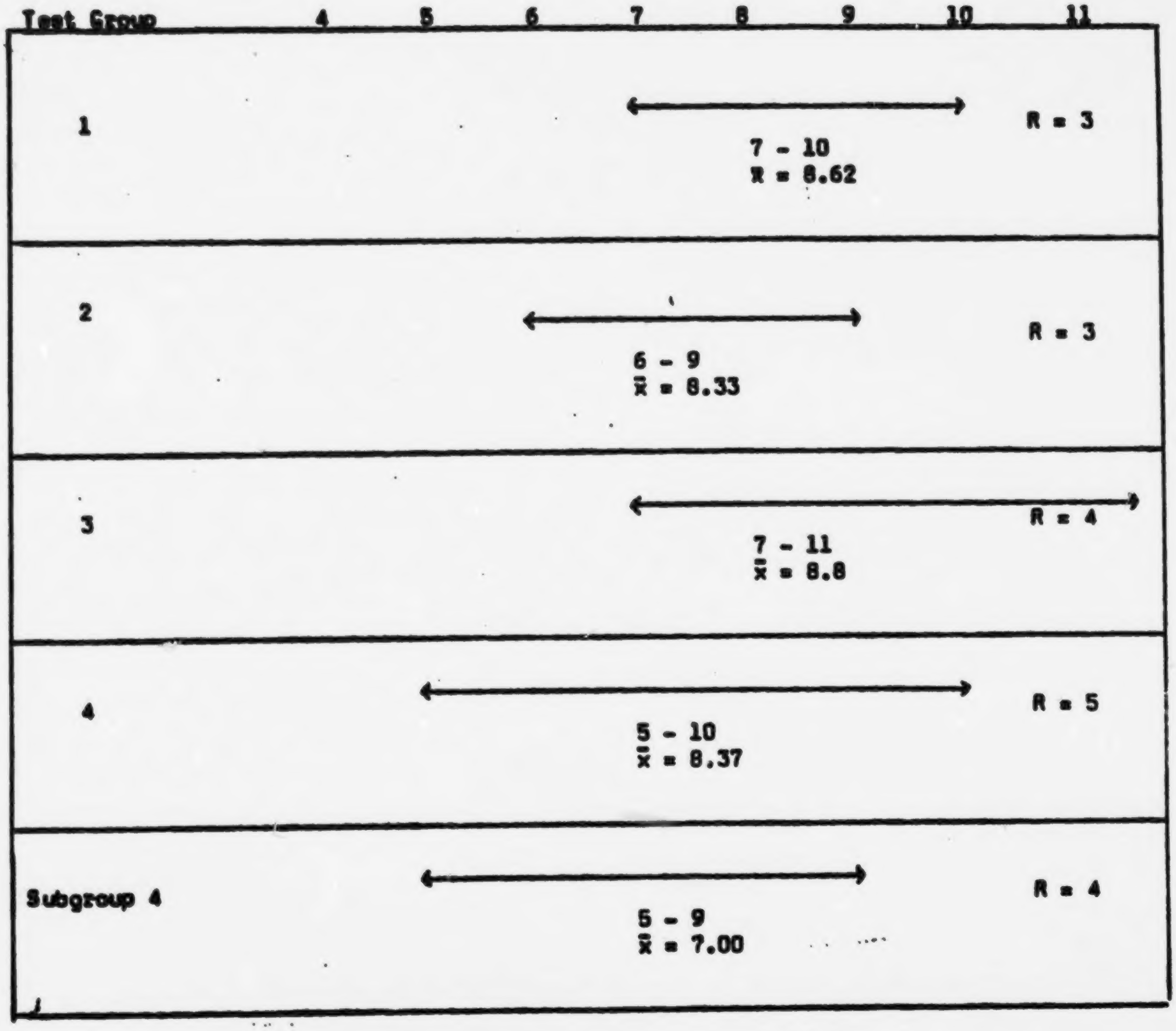


TABLE 27

Comparison of Range for Females,

Groups One Through Four, Post-Test

RANGE

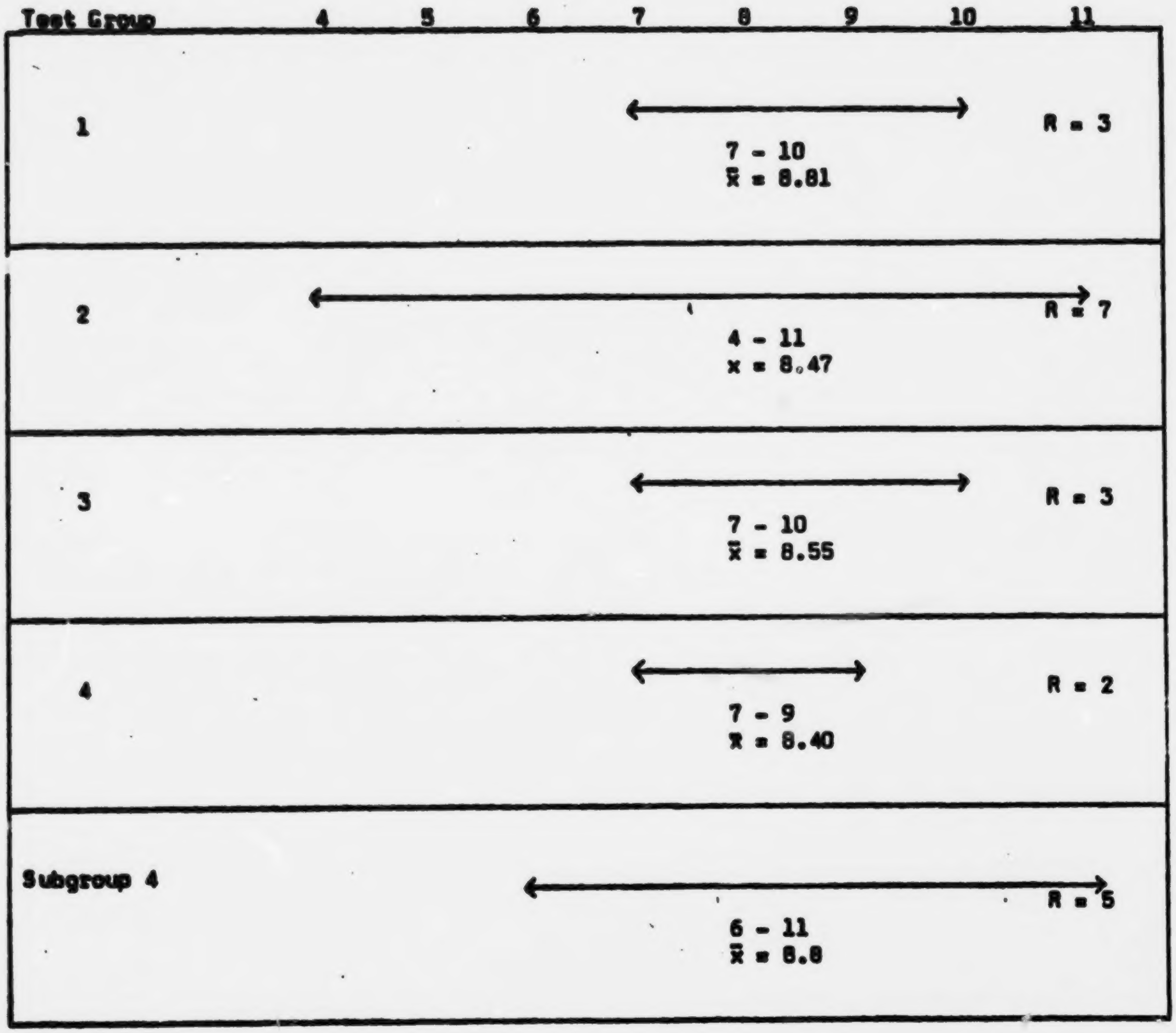


TABLE 28

Comparison of Range for Males,

Groups One Through Four, Post-Test.

PRE-TEST ONLY

Test Group	Females	Males	Pre-Test Grand Mean
1	$\bar{x} = 1.69$	$\bar{x} = 1.76$	$\bar{x} = 1.73$
2	$\bar{x} = 1.50$	$\bar{x} = 2.29$	$\bar{x} = 1.90$
3	$\bar{x} = 2.40$	$\bar{x} = 4.45$	$\bar{x} = 3.43$
4	$\bar{x} = 1.63$	$\bar{x} = 2.00$	$\bar{x} = 1.82$
	$\bar{x} = 1.81$	$\bar{x} = 2.63$	$\bar{x} = 2.22$

TABLE 29

Grand Means for Females, Males, and
Females and Males, All Groups

POST-TEST ONLY

Test Group	Females	Males	Post-Test Grand Mean
1	$\bar{X}$ = 8.62	$\bar{X}$ = 8.81	$\bar{X}$ = 8.72
2	$\bar{X}$ = 8.33	$\bar{X}$ = 8.47	$\bar{X}$ = 8.40
3	$\bar{X}$ = 8.80	$\bar{X}$ = 8.55	$\bar{X}$ = 8.68
4	$\bar{X}$ = 8.37	$\bar{X}$ = 8.40	$\bar{X}$ = 8.39
Subgroup 4	$\bar{X}$ = 7.00	$\bar{X}$ = 8.80	$\bar{X}$ = 7.90
	$\bar{X}$ = 8.22	$\bar{X}$ = 8.61	$\bar{X}$ = 8.42

TABLE 30

Grand Means for Females, Males, and
Females and Males, All Groups

PRE-TEST ONLY

Test Group	Females	Males	Pre-Test Grand Mean
1	$\bar{X}$ = 1.69	$\bar{X}$ = 1.76	$\bar{X}$ = 1.73
2	$\bar{X}$ = 1.50	$\bar{X}$ = 2.29	$\bar{X}$ = 1.90
3	$\bar{X}$ = 2.40	$\bar{X}$ = 4.45	$\bar{X}$ = 3.43
Means by Sex	$\bar{X}$ = 1.86	$\bar{X}$ = 2.83	$\bar{X}$ = 2.35
4	$\bar{X}$ = 1.63	$\bar{X}$ = 2.00	$\bar{X}$ = 1.82

TABLE 31

Grand Means For Academic and Non-Academic Viewers, Pre-Test Only

POST-TEST ONLY

Test Group	Females	Males	Post-Test Grand Mean
1	$\bar{X} = 8.62$	$\bar{X} = 8.81$	$\bar{X} = 8.72$
2	$\bar{X} = 8.33$	$\bar{X} = 8.47$	$\bar{X} = 8.40$
3	$\bar{X} = 8.80$	$\bar{X} = 8.55$	$\bar{X} = 8.68$
Means	$\bar{X} = 8.58$	$\bar{X} = 8.61$	$\bar{X} = 8.60$
4	$\bar{X} = 8.37$	$\bar{X} = 8.40$	$\bar{X} = 8.39$
Subgroup 4	$\bar{X} = 7.00$	$\bar{X} = 8.80$	$\bar{X} = 7.90$
	$\bar{X} = 7.69$	$\bar{X} = 8.60$	$\bar{X} = 8.15$

TABLE 32

Grand Means For Academic and Non-Academic Viewers, Post-Test Only

PRE-TEST ONLY

In Color, In Person Test Group	Females	Males	Pre-Test Grand Mean
1	$\bar{x} = 1.69$	$\bar{x} = 1.76$	$\bar{x} = 1.73$
2	$\bar{x} = 1.50$	$\bar{x} = 2.29$	$\bar{x} = 1.90$
4	$\bar{x} = 1.63$	$\bar{x} = 2.00$	$\bar{x} = 1.82$
Means	$\bar{x} = 1.61$	$\bar{x} = 2.02$	$\bar{x} = 1.82$
Monochrome, CCTV 3	$\bar{x} = 2.40$	$\bar{x} = 4.45$	$\bar{x} = 3.43$

TABLE 33

Grand Means for Males and Females
Watching in Monochrome on CCTV,
And Those Watching in Color, in Person
Pre-Test Only

POST-TEST ONLY

In Color, In Person Test Group	Females	Males	Post-Test Grand Mean
1	$\bar{X} = 8.62$	$\bar{X} = 8.81$	$\bar{X} = 8.72$
2	$\bar{X} = 8.33$	$\bar{X} = 8.47$	$\bar{X} = 8.40$
4	$\bar{X} = 8.37$	$\bar{X} = 8.40$	$\bar{X} = 8.39$
Means	$\bar{\bar{X}} = 8.44$	$\bar{\bar{X}} = 8.56$	$\bar{X} = 8.50$
Monochrome, CCTV 3	$\bar{\bar{X}} = 8.80$	$\bar{X} = 8.55$	$\bar{X} = 8.66$

TABLE 34

Grand Means for Males and Females
Watching in Monochrome on CCTV,
And Those Watching in Color, in Person
Post-Test Only

6.

CONCLUSIONS

Beware The Wind As An Information-Imparting Film

OVERVIEW

THE SIMPLEST AND MOST DEFINITE CONCLUSION TO BE DRAWN FROM THIS PHASE OF THE STUDY IS THAT A PERSON'S FACTUAL KNOWLEDGE ABOUT THE DANGERS OF AIR POLLUTION WILL BE INCREASED BY FOUR TO SEVEN TIMES AS A RESULT OF ONE EXPOSURE TO BEWARE THE WIND.

BEYOND THIS, THE EVIDENCE TENDS TO SUGGEST THE FOLLOWING:

1) FEMALES LEARNED SLIGHTLY MORE THAN MALES FROM THE FILM. THEY KNEW SLIGHTLY LESS ABOUT AIR POLLUTION THAN MALES, BUT LEARNED NEARLY AS MUCH, THUS ACCOUNTING FOR A HIGHER OVERALL GAIN.

2) ADULTS LEARNED SLIGHTLY MORE THAN COLLEGE STUDENTS FROM THE FILM. AGAIN, THEY KNEW SLIGHTLY LESS BEFORE SEEING THE FILM AND STILL LEARNED NEARLY THE SAME AMOUNT AS THE STUDENTS.

3) AMONG STUDENTS, THERE IS A STATISTICALLY-SIGNIFICANT INCREASE IN AMOUNT LEARNED BY THOSE WHO SAW THE FILM IN COLOR ON A REGULAR SCREEN OVER THOSE WHO SAW IT ON A MONOCHROME CC-TV SYSTEM.

It is now possible to combine the two sets of tables (1 through 13 and 14 through 34) in order to draw some final conclusions regarding the efficiency of Beware The Wind in imparting information to various kinds of people in various viewing situations. We can now attempt to compare the percentages of male - female and student - adult response in various groups -- and whether they were watching in color in person or on closed-circuit television -- with their actual score results.

A.

Comparison of Cognitive Information Gain by Sex

A breakdown by groups results in the following: the 38.2 per cent females in group 1 scored 1.69 on the pre-test, and 8.62 on the post-test - representing an increase of 6.93 points after viewing the film. The males in group 1, 61.8 per cent of the total group, scored 1.76 on the pre-test and 8.81 on the post-test - an increase of 7.05 points after viewing the film.

In group 2 the females, constituting 26.1 per cent of the total number of viewers in group 2, scored 1.50 on the pre-test and 8.33 on the post-test - an increase of 6.83 points after viewing the film. The males in group 2, 73.9 per cent, scored 2.29 on the pre-test and 8.47 on the post-test - an increase of 6.18 points after viewing the film.

The females in group 3, 31.3 per cent, scored a mean of 2.40 on the pre-test and 8.80 on the post-test - an increase of 6.40 points after viewing the film. The males in group 3, 68.7 per cent, scored 4.45 on the pre-test and 8.55 on the post-test - an increase of 4.10 points after viewing the film.

In group 4, the Parent-Teachers Association Group from Main Street School in North Syracuse, N. Y.; females, 89.6 per cent of this group, scored 1.63 on the pre-test and 8.37 on the post-test - an increase of 6.74 points after viewing the film. The males in the group, constituting 10.4 per cent of this group, scored 2.00 on the pre-test and scored 8.40 on the post-test - an increase of 6.40 points after viewing the film.

Females, then, constituting 47.3 per cent of the total survey group, had a mean score of 1.81 on the pre-test. They scored 8.22 on the post-test -- an increase of 6.41 points after viewing the film. Males, constituting 52.7 per cent of the total survey group, had a mean score of 2.63 on their pre-test and an 8.61 on the post-test. This represents an increase of 5.98 points after viewing the film.

8.

Comparison of Cognitive Information Gain Among Students and Adults

60.1 per cent of the total survey subjects, male and female, were in an academic situation; that is, students at Syracuse University. Together, they had a means score of 2.35 on the pre-test and 8.68 on the post-test, resulting in an increase of 5.25 points after viewing the film.

39.9 per cent of the total survey subjects were members of a Parent-Teachers Association Group. These males and females in a non-academic situation scored 1.82 on the pre-test and 8.39 on the post-test, resulting in an increase of 6.57 points after viewing the film. This would tend to indicate that the Parent-Teachers Association Group improved slightly more than the academic group after viewing the film. However, this must be tempered by the realization that the pre-test score for the academic group was higher than that of the same test in the Parent-Teachers Association Group. In other words, the PTA Group, representing more of a cross section of a community in terms of its adult population, knew less before the film than the academic group. The post-test average scores for both the academic and PTA Groups were nearly comparable in the post-test situation.

It is interesting to note here that a post-test only was given to a small sample of the PTA Group. These were people who arrived too late for the pre-test, but just in time for the film, and the males and females together had an average score in the post-test of 8.15. This was slightly below the post-test score of 8.39, but still all in all, a very similar score. This might tend to indicate that the testing instrument had little effect in tipping off the audience to the content of the film. It would appear, then that this audience did not realize that the questions upon which they were tested in the pre-test were actually film content.

Comparison of Cognitive Information Gain According to Conditions of Reception (Film Screen V. CC-TV)

An interesting comparison can be made between those groups watching in color and in person and those watching in monochrome on closed-circuit television. The males, comprising 40.9% of the group watching in color in person, scored 2.02 on the pre-test and 8.56 on the post-test - resulting in an increase of 6.54 after viewing the film. The females in the same treatment group, 59.1 per cent of the group, averaged 1.61 correct responses on the pre-test, and 8.44 correct responses on the post-test - a net increase of 6.83. The net increase in correct responses, therefore, is very similar. The males, 68.7 per cent, in the group watching in monochrome on closed-circuit television, scored 4.45 on the pre-test and 8.55 on the post-test, resulting in an increase of 4.10 correct responses after viewing the film. The females, 31.3 per cent of the group watching in monochrome on closed-circuit television, scored 2.40 on the pre-test and 8.80 on the post-test, resulting in a net increase of 6.40 correct responses after viewing the film.

The grand mean for males and females watching in color and in person is 1.82 correct responses in the pre-test and 8.50 in the post-test, resulting in a net increase of 6.68 correct responses after viewing the film. The grand mean of the males and females watching in monochrome on closed-circuit television indicate a pre-test grand mean of 3.43 and 8.68 in the post-test, indicating a net increase of 5.25 correct responses after viewing the film.

There appears, therefore, to be some significant difference between the group watching in color in person and that watching monochrome closed circuit television. It appears that the group watching in color and in person had higher scores on the post-test than did the group watching in monochrome on closed-circuit television. The difference here between these grand means is 1.43 correct responses, which is higher than in other comparisons in other groups. Further investigation should be made to evaluate this particular difference, which seems significant. The conclusions here might be that those in the audience without access to a color receiver would not learn as much as those who had color receivers and who watched the program in color. Further extensive investigation is therefore warranted.

Notes: Group IV Response

In a general session which followed the film at the close of the post-test, our secretary noted the following reactions to the film. When asked what impressed them the most about the film, one lady indicated that the example of the town that "died" because of the smoke problem, pointed up the seriousness of the situation. Others seconded this idea, indicating that showing actual effects of air pollution brings home the point that the problem does exist and that it does create health problems for humans, animals and plants. Another lady in the audience indicated that she thought the music was well-tailored to the production and helped to point up serious moments. Another indicated that color was helpful and certainly brought home the point. One viewer indicated that she did not know about the problems of animal health created by air pollution until it was explained to her in the film. Several people indicated that the film seemed vague on how local citizenry get big business to cooperate in cutting down on air pollution. One indicated that the close was very general and that the paths open for action were not clear. As a final question, the researcher asked if the dramatic image of Robert Preston as the narrator lent an aura of respectability or credibility to the film. The general reaction here was that any good, clear voice could have done an equally good job and in fact many of the people had no idea that it was Robert Preston's voice.

3.

BEWARE THE WIND AS AN ATTITUDE-INFLUENCING FILM

A Pilot Study

INTRODUCTION

The business of the documentary, John Grierson long ago observed, is to dramatize the actual. From the beginning of the cinema, men have used this powerful communicative form not merely to enhance the processes of cognition, but to move into the realms of the affective -- to stimulate, to involve, to make men more aware of the world around them and to actively particpate in the direction and control of their affairs.

Clearly, Beware The Wind was intended as more than one more lehrstücke about the "facts" of air pollution in the world today. It is obvious that people learn these facts from the film, but what more do they bring from it? As a result of seeing the film, for example, are they stimulated to be more concerned about the problem? How much "more concerned"? Sufficiently to initiate new behaviors -- to seek action in their community, to go to a local meeting, to write letters to the newspaper? Obviously, changes of behavior in this sense must be precipitated by affective as well as cognitive changes in those who witness the film. There must, in short be a change in attitude or feeling about the subject itself.

The measurement of attitude change, however, is among the most challenging and perplexing problems confronting the communications researcher. The attempts to determine, for example, whether the continued viewing of scenes of fictional violence on a television or motion picture screen will in fact alter one's tolerance of violence in real life (or encourage one to engage in violent acts) is one of the most hotly disputed areas of behavioral research in America today. Quite obviously, the major difficulty in assessing the effects of a single medium (let alone of a discrete and specific program or film) is to isolate the conditions of exposure of it from exposure to all other media in an age of "over-communication." Even these advertisers who seek concentration on a certain medium in a certain geographical area -- and then report a "success story" for the results of their selected campaign -- cannot provide us with any certain indication of the specific factors which influenced product buyers. In any case, it is arguable that the techniques of influencing people to buy a certain product are germane to the problem of changing attitudes regarding problems of serious public concern. Since the failure of the famed Cincinnati United Nations informational campaign of the 1940's, communications researchers have been wary of the usefulness of massive "communicative overload" as a way of raising the level of public knowledge and concern about matters with which they feel they have no concern.

It is not necessary to review the long history of research in public opinion and attitude change at this point. Where meaningful results have been reported, such research has been conducted on a carefully controlled scientific basis with adequate financing. The limits under which this evaluation is conducted preclude the hiring of properly-trained public-opinion researchers or the establishing of any elaborate research design. It was possible, however, to set up a small pilot study to review the potentialities of Beware The Wind as an instrument for changing people's feelings about the seriousness of the problem. What we wanted to find out was simply whether people actually perceived air pollution as a more serious problem after seeing this film than they did before seeing it. The way in which we attempted to measure this change -- if indeed it occurred -- and the results, are reported in this section.

Under no circumstances are the results reported here to be given any weight beyond that given to a pilot study. The research team merely wished to explore the possibilities for extensive and continuing research in this area.

RESEARCH DESIGN

In this case, several existing pre-conditions literally fashioned the research design. For the past several years, the principal investigator in this evaluation has taught a course titled "Criticism In The Public Arts" to both senior undergraduate and graduate students at the Newhouse Center of Syracuse University. The objectives of the course are to develop within the student a greater sensitivity to the approaches and methods of communication in the cinematic and electronic media. It is not a course in aesthetics, in communications science or in public policy -- but an attempt to synthesize these various approaches into a critical perspective within which students can formulate informed opinion about _specific_ communications objects.

As a part of the course, television public affairs programming and documentary films are given intensive analysis. Individual works are screened and considered from various points of view. Normally, programs and films devoted to matters of public concern and policy are shown to the students. It was felt that this situation provided an ideal opportunity to show the students the film _Beware The Wind_ in such a manner that _they would not be aware_ that their viewing of it was part of a test. In other words, it was held that a relatively true measure of whether the film influenced their attitude about air pollution could be gained by making the viewing of it an aspect of a larger activity they had been led to anticipate as normal.

Thus _Beware The Wind_ was viewed as one of some 30 films dealing with a variety of social problems ranging over such topics as race-relations, unemployment, water pollution, civil rights and drug-addiction. The films were mainly TV network productions, but some theatrical-release documentaries were included during the semester.

The design was as follows:

At the beginning of the semester all students enrolled in the course were given an inventory sheet containing fifteen items which are generally-accepted as "social concerns". The students were told that since so much of the work in the course involved the development of judgements about the social role which the media should play, their opinion of which social problems they considered "most urgent" would be of interest. Students were asked to rank the fifteen items according to their opinion of how "urgent" they felt the problem to be, with "1" assigned to the most urgent, "2" to the next most serious, and so on to "15". The students ranked the items, signed the sheets and returned them to the instructor.

No mention was made of the test or its results for the next 14 weeks. The course proceeded normally, and students screened the various films, joined in discussions, and otherwise completed reading and outside (home-TV) viewing assignments. Beware The Wind was shown approximately in the 7th week of the course, along with a documentary film on the problems of "conformity" in our society produced by WCAU-TV in Philadelphia.

The film was given no special discussion or any introduction beyond the instructor's remarks which noted that the film was "independently produced" and "a good example of documentary films dealing with environmental problems."

In the 15th week of the semester, the instructor passed out a second set of inventory sheets identical to the first and asked the students to rank the items again. He said that he had "misplaced" the first set, and would like to have them "to compare with classes in future years." The students ranked the fifteen items again, and a comparison was made of the two rankings.

The validity of such a design obviously rests upon a number of assumptions, none of which were subject to extensive analysis. The first, of course, is that most students would -- with exception of perhaps the first two or three rankings, forget the order of ranking of the items. The students were not told to rank them as they ranked them the first time. Nor were they told to rank them differently. They were simply asked to "rank them again." The results, reported below, indeed indicate that most students did rank them differently. It is worth noting that students did not ask any questions when handed the inventory for the second time. It is also important to note that at no time did the instructor suggest that there was any special quality in Beware The Wind -- nor were students given any reason to wonder why they were being tested.

Obviously, the students' exposure to messages about air pollution outside the class-room may have shown extreme variance. Yet even here, it is possible to assume a certain degree of sameness in the students' other exposures to air pollution messages during the 14 week period. Mass media exposure patterns might be assumed to have been fairly similar, if not identical, for all students in the group. None of these factors, however, were isolated and given more intensive investigation.

Despite shortcomings in the overall design, the investigators had reason to believe that any change, upward or downward, in the ranking of the urgency of Air Pollution as a social concern could in strong measure be attributed to a single exposure to Beware The Wind.

DESCRIPTION OF THE STUDY GROUP

The pre and post inventory was administered to the undergraduate section of the course Criticism in the Public Arts. Sixty-seven (67) seniors, all majoring in Radio-TV were enrolled in the course, which is required of all majors in the field. The age-range for the group fell between 19 and 33, but 60 of the 67 students enrolled were either 21 or 22 years old, the typical age for a college senior. Twelve (12) of the students were female, the other 55 male. No affort was made here to assess or describe results of the test in terms of age and sex variations.

THE TEST INSTRUMENT

The inventory of "social problems" to be ranked was composed on an arbitrary basis, with items selected from a longer list of popular terms gleaned from daily media exposure. There was no effort to present more sophisticated descriptive terms, nor was serious consideration given to the exclusivity or discreteness of items. Thus such phrases as "environmental insult" were by-passed in favor of day-to-day media phrases like "Pollution of our Water Supply." At the same time, more sophisticated analysts would see relationships between "Unemployment" and "Poverty" that extend far beyond the day-to-day uses of these terms. The inventory items, then, were deliberately selected for their general simplicity and ease of identification.

The attached is self-explanatory. It will be noted that the item "Air Pollution" was given a neutral position, one-third of the way down the list.

SAMPLE COPY

Rank the following national domestic concerns in what you think is their order of urgency and importance. The Number One (1) should indicate highest priority; Fifteen (15) the lowest.

(_____) Crime Rate Increase

(_____) Birth Control

(_____) Venereal Disease

(_____) Poverty

(_____) Air Pollution

(_____) Juvenile Delinquency

(_____) Drug Addiction

(_____) Pollution of Our Water Supply

(_____) Rights of Minorities

(_____) Effects of Smoking

(_____) Unemployment

(_____) Alcoholism

(_____) Hospital and Medical Costs

(_____) Air Traffic Congestion

(_____) Commuter Traffic Congestion

AGE_______________

FIELD OF BACCALAUREATE DEGREE__________________________________

NAME____

TEST RESULTS

Below is a breakdown of the way in which the students ranked air pollution in the pre and post-screening inventories.

ORDER OF "URGENCY" GIVEN TO "AIR POLLUTION"	NUMBER OF STUDENTS ASSIGNING RANK		% OF STUDENTS ASSIGNING RANK	
	PRE	POST	PRE	POST
First	0	3	0.0	4.5
Second	0	5	0.0	7.5
Third	3	2	4.5	3.0
Fourth	5	8	7.5	12.0
Fifth	1	9	1.5	13.5
Sixth	15	5	22.5	7.5
Seventh	9	8	13.5	12.0
Eighth	12	10	18.0	15.0
Ninth	8	4	12.0	6.0
Tenth	2	4	3.0	6.0
Eleventh	5	4	7.5	6.0
Twelfth	2	0	3.0	0.0
Thirteenth	1	2	1.5	3.0
Fourteenth	4	1	6.0	1.5
Fifteenth	0	2	0.0	3.0

CONCLUSIONS

Despite the various limitations in research design, the test results reported above are dramatic enough to warrant further, more extensive and carefully-controlled experiments. It would appear that a single exposure to the film, Beware The Wind, has produced a decided change in the degree of importance which college students attach to air pollution as an "urgent" social concern.

The pre and post-screening inventory rankings reported above trace the shifts in opinion for the single item of "Air Pollution" only. No effort has been made to relate such shifts to changes in the comparative rankings of the other 14 items listed in the inventory. Such a comparison could easily be made, but in light of the tentative and exploratory nature of the entire study, it is not fruitful to explore this aspect of the changes at this time. We can proceed, however, upon the assumption that exposure to Beware The Wind was the most significant factor in producing opinion change regarding the specific item "Air Pollution." Under these circumstances, the following specific changes can be attributed to exposure to the film.

1) Before screening the film, only 3 students ranked Air Pollution among the three "most urgent" social concerns. After exposure, a total of 10 students ranked Air Pollution among the top three (one-fifth) "most urgent" items. Within the total test-population, this represented a jump from 4.5 per cent to 15.0 per cent.

2) Similar dramatic changes in feeling about the urgency of air pollution are indicated in the shift of opinion which placed Air Pollution among the top one-third of "most urgent" social concerns. Before screening the film, 9 students (13.5 per cent) ranked air pollution among the first five items, and after screening 27 students (40.5 per cent) ranked the item among the first five.

On the basis of these two indices, it can be suggested that the film can change the strength of people's feelings about the urgency of dealing with air pollution. In simplest form, two out of every three students tested felt that air pollution was more dangerous and of greater public concern because they were exposed to Beware The Wind.

The results also tend to yield some additional tentative conclusions.

1) There was less tendency on the part of those who minimized the urgency of air pollution at the outset to change their opinion after seeing the film. That is, the number of students who changed their minds after giving the item low ranking on the initial inventory.

It is noted that 5 students ranked air pollution among the last three in order of urgency on the pre-test and 5 students ranked air pollution in the last three positions on the post-test. 14 students ranked it among the last five items on the pre-test, and 13 ranked it among the last five on the post-test.

2) Concomitantly, the most dramatic shifts in opinion came among those who tended to rank air pollution in a more neutral or "middle" position among the total number of items offered in the initial test.

The largest group of students -- 42 in number, or 66 per cent -- gave air pollution a ranking of sixth, seventh, eighth or ninth in the pre-screening inventory. The post-test revealed that it was this group -- composed of those who seemingly had no strong feeling about air pollution at the outset -- who were most positively influenced by the film, and whose feelings about the urgency of air pollution became stronger. On the post-test, the number of students who ranked air pollution from sixth through ninth position dropped from 42 (66 per cent) to 27 (44.5 per cent). All but one of the post-test shifts upward to the top 5 items came from within this middle group.

The preceding tends to confirm what has frequently been discovered in a variety of opinion and attitude studies -- that people with no strong feelings about a matter tend to be most influenced by communications about the subject.

Under all circumstances, the conclusions stated above must be taken with a strong degree of reservation. Given time, adequate facilities and additional expertise, a study of this type could produce far more meaningful data and more certain conclusions. There is a suggestion here that Beware The Wind is an extremely forceful persuasive instrument, but far more rigorous design and methodology will be required if we can advance more than a suggestion.

APPENDICES

Computer Print-Out Sheets

BEWARE THE WIND

A computer analysis, subsequent to the initial study, was run on the IBM 360 Computer. Raw data sheets were transferred to IBM machine scoring sheets and then transferred to IBM unit record cards. These data were then analyzed using existing programs of factor analysis and analysis of variance.[1]

The following data has been abstracted from the print out sheets:

Total Sample Pre-Test Mean = 2.3409; Sigma 1.7830

Total Sample Post-Test Mean = 8.4697; Sigma 1.1899

Additional data is given in the read out sheets, includes an additional scoring of mean and sigma for each item; and the choice distributions (in percentage) over the ten items. The point biserial correlations R (total) should be disregarded as each statement is independent.

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[1] This analysis of mean and sigma is at slight variance with the original report due to the "dumping" of several sets of scores which the scoring machine failed to read and transfer correctly.

A further breakdown resulted in the following data:

Total Male Pre-Test Mean = 2.8750; Sigma = 2.0194

Total Male Post-Test Mean = 8.5938; Sigma = 1.1141

Total Female Pre-Test Mean = 1.8382; Sigma = 1.3461

Total Female Post-Test Mean = 8.3529; Sigma = 1.2458

Additional data is given as above.

Analysis of Variance

In the "Groups by Trials Analysis of Variance," the probability levels indicate that there is no significant difference between groups. This can be interpreted to mean that each group's scores improved about the same amount in the post-test. This is also true with the scores within each group when analyzed separately.

In the "Sex by Trials Analysis of Variance," the probability levels indicate that there is no significant difference between groups or within groups. In the groups by trials the probability of 0.0233 may be significant, due to a low number of female subjects in some of the groups.

Summary

Males scored higher on the pre-test than females, but had a greater variance in their scores. Both males and females improved significantly on the post-test with a net improvement of 6.1288, or a little more than six more correct responses. The variance of these scores decreased, indicating more people knew the correct responses.

There appears no significant difference between groups or within groups in the analysis of variance. Each group did equally well in improvement on the post-test. We can therefore conclude that the treatment (showing the film Beware The Wind) did have a significant influence upon the variety of test subjects who were subjected to this treatment.

```
TVR -- TOTAL SAMPLE - PRE

PARAMETERS
COL  1- 5 =    11
COL  6-10 =   132 — No. of Ss
COL 11-15 = 11010
COL 16-20 =     0
COL 21-25 =     0

DATA FORMAT = (A3,3X,6A1)

ITMS             1
           11.0000   Total No Items

MEAN             1
            2.3409   Total test mean

SGMA             1
            1.7830   Test Standard Deviation

ALPH             1
            0.5132   Test Reliability (Cronbach, 1951)
```

```
ITEM   SCALE   MEAN   SIGMA   R(TOTAL)   R(SCALE)
  1      0     0.13   0.335    0.5988      0.0
  2      0     0.21   0.409    0.2646      0.0
  3      0     0.17   0.373    0.6783      0.0
  4      0     0.34   0.474    0.3465      0.0
  5      0     0.08   0.276    0.0653      0.0
  6      0     0.28   0.449    0.2118      0.0
  7      0     0.20   0.398    0.4822      0.0
  8      0     0.18   0.386    0.6039      0.0
  9      0     0.14   0.351    0.2847      0.0
 10      0     0.50   0.500    0.4291      0.0
 11      0     0.11   0.308    0.6655      0.0
```

Item means, standard deviations & point - biserial correlations

(item responses converted to 1 = right, 0 = wrong for mean, sigma & pt.-biserials)

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM   REV   KEY   ZERO     1     2     3     4     5     6     7     8     9

  1     0     4     0      36     3    48    13     1     0     0     0     0
  2     0     3     0      13    13    21    30    23     0     0     0     0
  3     0     5     0      23    21    25    14    17     0     0     0     0
  4     0     3     0       7    19    34    19    21     0     0     0     0
  5     0     3     0       8     2     8    46    36     0     0     0     0
  6     0     3     0      23    26    28    16     7     0     0     0     0
  7     0     5     0      37    33     5     5    20     0     0     0     0
  8     0     1     0      18    54    22     4     2     0     0     0     0
  9     0     3     0       4     3    14    17    61     0     0     0     0
 10     0     2     0      14    50    15    12     9     0     0     0     0
 11     0     1     1      11     6    68    10     5     0     0     0     0
```

Correct answer

Blanks

% of sample who chose each possible alternative

```
TVR -- TOTAL SAMPLE -- POST

PARAMETERS
COL  1- 5 =    11
COL  6-10 =   132
COL 11-15 = 11010
COL 16-20 =     0
COL 21-25 =     0

DATA FORMAT = (A3,3X,6A1)


ITMS            1
              11.0000


MEAN            1
               8.4697


SGMA            1
               1.1899


ALPH            1
               0.3352
```

```
ITEM  SCALE  MEAN  SIGMA   R(TOTAL)  R(SCALE)
  1     0    0.94  0.239    0.3938     0.0
  2     0    0.89  0.308    0.5082     0.0
  3     0    0.92  0.265    0.3536     0.0
  4     0    0.15  0.359    0.2416     0.0
  5     0    0.14  0.351    0.2916     0.0
  6     0    0.83  0.379    0.3828     0.0
  7     0    0.88  0.326    0.4002     0.0
  8     0    0.91  0.287    0.4349     0.0
  9     0    0.87  0.335    0.3609     0.0
 10     0    0.95  0.208    0.3916     0.0
 11     0    0.98  0.149    0.3593     0.0
```

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM   REV   KEY   ZERO    1     2     3     4     5     6     7     8     9

  1     0     4     0      0     1     5    94     0     0     0     0     0
  2     0     3     0      0     7    89     3     1     0     0     0     0
  3     0     5     0      1     4     2     2    92     0     0     0     0
  4     0     3     0      4    62    15    11     8     0     0     0     0
  5     0     3     0      7     3    14    38    38     0     0     0     0
  6     0     3     0      2     5    83     6     4     0     0     0     0
  7     0     5     0      0     0     1    11    88     0     0     0     0
  8     0     1     0     91     6     2     0     2     0     0     0     0
  9     0     3     0      0     2    87     2    10     0     0     0     0
 10     0     2     0      1    95     1     2     1     0     0     0     0
 11     0     1     0     98     0     1     1     1     0     0     0     0
```

```
MALE -- PRE TEST -- TVR

PARAMETERS
COL  1- 5 =     11
COL  6-10 =     64 ← No. of Males
COL 11-15 =  11010
COL 16-20 =      0
COL 21-25 =      0

DATA FORMAT = (A3,3X,6A1)


ITMS            1
               11.0000


MEAN            1
                2.8750


SGMA            1
                2.0194


ALPH            1
                0.5819
```

```
ITEM  SCALE  MEAN   SIGMA   R(TOTAL)   R(SCALE)
  1     0    0.19   0.390    0.7037     0.0
  2     0    0.22   0.413    0.3509     0.0
  3     0    0.23   0.424    0.7649     0.0
  4     0    0.42   0.494    0.2252     0.0
  5     0    0.09   0.291    0.0465     0.0
  6     0    0.25   0.433    0.2323     0.0
  7     0    0.28   0.450    0.4345     0.0
  8     0    0.25   0.433    0.7505     0.0
  9     0    0.17   0.377    0.1923     0.0
 10     0    0.61   0.488    0.3786     0.0
 11     0    0.16   0.363    0.7512     0.0
```

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM   REV   KEY   ZERO     1     2     3     4     5     6     7     8     9

   1     0     4     0     30     0    52    19     0     0     0     0     0
   2     0     3     0     14     9    22    28    27     0     0     0     0
   3     0     5     0     20    22    19    16    23     0     0     0     0
   4     0     3     0      3    14    42    17    23     0     0     0     0
   5     0     3     0      6     2     9    34    48     0     0     0     0
   6     0     3     0     20    37    25    12     5     0     0     0     0
   7     0     5     0     39    16     9     8    28     0     0     0     0
   8     0     1     0     25    48    17     6     3     0     0     0     0
   9     0     3     0      5     2    17    17    59     0     0     0     0
  10     0     2     0     11    61     8    12     8     0     0     0     0
  11     0     1     2     16    11    62     6     3     0     0     0     0
```

```
 MALE -- POST TEST -- TVR

PARAMETERS
COL  1- 5 =    11
COL  6-10 =    64
COL 11-15 = 11010
COL 16-20 =     0
COL 21-25 =     0

DATA FORMAT = (A3,3X,6A1)

IHC2C9I IBCOM - PROGRAM INTERRUPT- DIVIDE CHECK OLD PSW IS  FF25000F4200FE56 . REGISTER CONTAINED   0000C00000000000

TRACEBACK FOLLOWS-  ROUTINE  ISN  REG. 14   REG. 15   REG.  0   REG.  1

                     MAIN         000087E0  5000C020  00C00088  000717F8

ENTRY POINT=  5000C020

STANDARD FIXUP TAKEN , EXECUTION CONTINUING


ITMS            1
               11.0000


MEAN            1
                8.5938


SGMA            1
                1.1141


ALPH            1
                0.2787
```

DISREGARD

Error message is irrelevant

```
ITEM   SCALE   MEAN   SIGMA    R(TOTAL)   R(SCALE)
  1      0     0.97   0.174     0.3375      0.0
  2      0     0.91   0.291     0.5563      0.0
  3      0     0.92   0.268     0.6255      0.0
  4      0     0.19   0.390     0.1752      0.0
  5      0     0.14   0.348     0.2685      0.0
  6      0     0.88   0.331     0.1166      0.0
  7      0     0.89   0.312     0.4564      0.0
  8      0     0.89   0.312     0.5013      0.0
  9      0     0.84   0.363     0.4997      0.0
 10      0     0.97   0.174     0.2569      0.0
 11      0     1.00   0.0       0.0         0.0
```

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM   REV   KEY   ZERO     1     2     3     4     5     6     7     8     9

  1     0     4     0       0     2     2    97     0     0     0     0     0
  2     0     3     0       0     6    91     2     2     0     0     0     0
  3     0     5     0       2     5     0     2    92     0     0     0     0
  4     0     3     0       0    67    19     8     6     0     0     0     0
  5     0     3     0       9     5    14    30    42     0     0     0     0
  6     0     3     0       3     6    87     0     3     0     0     0     0
  7     0     5     0       0     0     0    11    89     0     0     0     0
  8     0     1     0      89     6     3     0     2     0     0     0     0
  9     0     3     0       0     2    84     2    12     0     0     0     0
 10     0     2     0       0    97     2     0     2     0     0     0     0
 11     0     1     0     100     0     0     0     0     0     0     0     0
 FEMALE -- PRE TEST -- TVR

PARAMETERS
COL  1- 5 =    11
COL  6-10 =    68 ← No. of Females
COL 11-15 = 11010
COL 16-20 =     0
COL 21-25 =     0

DATA FORMAT = (A3,3X,6A1)


ITMS            1
               11.0000


MEAN            1
                1.8382


SGMA            1
                1.3461


ALPH            1
                0.2463
```

```
ITEM   SCALE   MEAN   SIGMA   R(TOTAL)   R(SCALE)
  1      0     0.07   0.261    0.3268      0.0
  2      0     0.21   0.404    0.1693      0.0
  3      0     0.10   0.304    0.4721      0.0
  4      0     0.26   0.441    0.4683      0.0
  5      0     0.07   0.261    0.0757      0.0
  6      0     0.31   0.462    0.2695      0.0
  7      0     0.12   0.322    0.4847      0.0
  8      0     0.12   0.322    0.2812      0.0
  9      0     0.12   0.322    0.4169      0.0
 10      0     0.40   0.489    0.4324      0.0
 11      0     0.06   0.235    0.4479      0.0
```

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM  REV  KEY  ZERO    1    2    3    4    5    6    7    8    9

  1    0    4     0    41    6   44    7    1    0    0    0    0
  2    0    3     0    12   16   21   32   19    0    0    0    0
  3    0    5     0    26   21   31   12   10    0    0    0    0
  4    0    3     0    10   24   26   21   19    0    0    0    0
  5    0    3     0     9    3    7   57   24    0    0    0    0
  6    0    3     0    26   15   31   19    9    0    0    0    0
  7    0    5     0    35   50    0    3   12    0    0    0    0
  8    0    1     0    12   59   26    1    1    0    0    0    0
  9    0    3     0     3    4   12   18   63    0    0    0    0
 10    0    2     0    16   40   22   12   10    0    0    0    0
 11    0    1     0     6    1   74   13    6    0    0    0    0
 FEMALE -- POST TEST -- TVR

PARAMETERS
COL  1- 5 =    11
COL  6-10 =    68
COL 11-15 = 11010
COL 16-20 =     0
COL 21-25 =     0

DATA FORMAT = (A3,3X,6A1)


ITMS            1
             11.0000


MEAN            1
              8.3529


SGMA            1
              1.2458


ALPH            1
              0.3725
```

```
ITEM   SCALE   MEAN   SIGMA   R(TOTAL)   R(SCALE)
  1      0     0.91   0.284    0.4211      0.0
  2      0     0.88   0.322    0.4698      0.0
  3      0     0.93   0.261    0.1250      0.0
  4      0     0.12   0.322    0.2996      0.0
  5      0     0.15   0.354    0.3157      0.0
  6      0     0.78   0.415    0.5493      0.0
  7      0     0.87   0.339    0.3545      0.0
  8      0     0.93   0.261    0.3964      0.0
  9      0     0.90   0.304    0.2514      0.0
 10      0     0.94   0.235    0.4722      0.0
 11      0     0.96   0.205    0.4633      0.0
```

```
CHOICE DISTRIBUTIONS (PERCENTAGES).

ITEM  REV  KEY  ZERO    1    2    3    4    5    6    7    8    9

  1    0    4    0      0    0    9   91    0    0    0    0    0
  2    0    3    0      0    7   88    4    0    0    0    0    0
  3    0    5    0      0    3    3    1   93    0    0    0    0
  4    0    3    0      7   57   12   13   10    0    0    0    0
  5    0    3    0      4    1   15   46   34    0    0    0    0
  6    0    3    0      1    4   78   12    4    0    0    0    0
  7    0    5    0      0    0    1   12   87    0    0    0    0
  8    0    1    0     93    6    0    0    1    0    0    0    0
  9    0    3    0      0    1   90    1    7    0    0    0    0
 10    0    2    0      1   94    0    4    0    0    0    0    0
 11    0    1    0     96    0    1    1    1    0    0    0    0
```

```
GROUPS BY TRIALS ANALYSIS OF VARIANCE

PARAMETERS
COL  1-5  =        1
COL  6-10 =        4
COL 11-15 =        2
COL 16-20 =        0
COL 21-25 =        [illegible]

DATA FORMAT = (12X,F[illegible])

GROUP 1    [illegible]4 SUBJECTS.       GROUP 1

GROUP 2    [illegible] SUBJECTS.        GROUP 2

GROUP 3    [illegible]2 SUBJECTS.       GROUP [illegible]

GROUP 4    [illegible]6 SUBJECTS.       GROUP [illegible]


VARIABLE  1 ANALYSIS.

SOURCE         MEAN SQUARE     D.F.     F-RATIO        P

TOTAL           11.[illegible]     263.

BETWEEN          [illegible]          131.

  GROUPS         [illegible]           4.       11.[illegible]      0.00[illegible]

  ERROR (G)      3.[illegible]         123.

WITHIN          [illegible]          132.

  TRIALS      2479.[illegible]          1.     1[illegible]        0.00[illegible]

  G BY T         1[illegible].[illegible]677          3.      [illegible]        0.00[illegible]

  ERROR (T)      1.[illegible]         128.

                   Group 1         2              3              4
G [illegible]                1               2              3              4
                 5.2794          5.2[illegible]         6.[illegible]          4.967[illegible]

                   Pre           Post
T [illegible]                1               2
                 2.34[illegible]          [illegible].4[illegible]7

GBY[illegible]              1 Pre           2 Post

Group            1.8824          [illegible].6[illegible]5

 "               2.[illegible]          [illegible].300[illegible]

 "               3.875[illegible]          [illegible].[illegible]875

 "               [illegible]          [illegible]
```

```
SEX BY TRIALS ANALYSIS OF VARIANCE

PARAMETERS
COL  [illegible]  =        1
COL  [illegible]  =        [illegible]
COL  11-15 =              [illegible]
COL  16-20 =              [illegible]
COL  21-25 =              [illegible]

DATA FORMAT = (12X,[illegible])

GROUP [illegible]   [illegible] SUBJECTS,      MALES

GROUP [illegible]   [illegible] SUBJECTS,      FEMALES


VARIABLE [illegible] ANALYSIS.

SOURCE         MEAN SQUA          D.F.      F-RATIO          P

TOTAL             [illegible]     [illegible]

BETWEEN           [illegible]     [illegible]

  GROUP           [illegible]        1.      1.[illegible]    [illegible]

  ER     (G)      [illegible]     [illegible]

WITHIN            [illegible]     132.

  TRIALS        247[illegible]       1.      1[illegible]     [illegible]

  G X T           [illegible]        1.      [illegible]      0.022[illegible]

  ER     (T)      [illegible]     [illegible]

                    Males        Females
G MEANS             1            2
                    5.73[illegible]  [illegible]

                    Pre          Post
T MEANS             1            2
                    2.[illegible]    [illegible]

                    1 Pre        2 Post
GBYT
           Males    [illegible]  [illegible]
           Females  1.[illegible]  [illegible]
```

APPENDICES

1.

GENERAL PERTINENT CORRESPONDENCE

2.

RETURNED QUESTIONAIRES FROM ETV PERSONNEL

I.

GENERAL PERTINENT CORRESPONDENCE

NOTE: The attached represent sample responses to our initial invitation to participate in the project. It will be noted that an error in some original letters of invitation caused confusion at some stations over whether Beware The Wind was available in 35 mm only. Upon being informed that 16 mm prints were available, these stations ordered screening prints.

(Copy of this letter sent to Diane for follow-up)

WDSE-TV

DULUTH-SUPERIOR AREA
EDUCATIONAL TELEVISION
CORPORATION

210 Bradley Building
Duluth, Minnesota 55802
727-8734

●

OFFICERS
A. M. Castle, President
Arthur C. Josephs, Vice President
Mrs. Thomas M. Spencer, Secretary
Earle Andrea, Treasurer

George A. Beck, General Manager

●

TRUSTEES—May 7, 1968

Class of 1969

Danielson, Dr. John O.
Gallagher, Sister Annella
Harrington, Dr. Vernon A., Jr.
Heshal, Julian B.
Hunter, Dr. William F.
Iverson, Albin B.
Karola, E. N.
Lampman, Mrs. E. C.
Lavine, Mrs. Max H.
Lomoe, Orville E.
Pearson, Burt D.
Rasmussen, Dr. L. V.
Salmi, Wilfred W.
Zeller, George C.

Class of 1970

Ball, Robert E.
Castle, A. M.
Claypool, James H.
Dettmann, Mrs. John
Eddie, George A.
Hitchcock, James P.
Hoeg, Mrs. Dwight C.
Josephs, Dr. Arthur C.
LaBud, Sister Verona
Lewis, Frederick C.
Miller, Mrs. R. Dale
Ness, Alvin B.
Nordholm, Richard
Ripple, Dr. Kenneth E.
Stuber, Ronald R.
Taylor, Herbert H.

Class of 1971

Andrea, Earle J.
Beck, George A.
Bye, Richard L.
Darland, Dr. R. W.
Forderbrugen, Kevin J.
Fride, Edward T., Jr.
Grahek, Dr. J. P.
Gray, Clarence W.
Husebo, Dr. Raymond J.
Josephs, Mrs. H. Y.
Kennedy, Clark
Manion, Dr. O. Gayle
Nicholl, L. A.
Ponikvar, Miss Veda
Rossman, George A.
Spencer, Mrs. Thomas M.
Swanson, Sam E.

November 11, 1968

Mr. A. William Bluem
President
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, N. Y.
13212

Dear Professor Bluem:

We have just now completed our December program schedule and due to some unforseen specials from our national and regional network, I am afraid we will be unable to get a time slot for "Beware the Wind" and the discussion.

We are holding definitely two dates in January.

I apologize for the change and hope that the January date will be acceptable. I would also request a timing on the film and the discussion at your earliest convenience so that we can make the proper arrangements.

Sincerely yours,

Warren

Warren J. Deacon
Program Director

WCET
CHANNEL /48
2222 CHICKASAW STREET
CINCINNATI, OHIO 45219
381-4033

November 21, 1968

Mr. A. William Bluem
Professor
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem:

We would like to receive a screening print of the film "Beware the Wind."

Thank you for your cooperation.

Yours very truly,

Grace Richardson

(Miss) Grace Richardson
Operations Manager

gr/

THE GREATER CINCINNATI TELEVISION EDUCATIONAL FOUNDATION

KETC 9
SAINT LOUIS EDUCATIONAL
TELEVISION COMMISSION
Channel
6996 MILLBROOK-SAINT LOUIS 63130—VOlunteer 3-0995

November 19, 1968

Mr. A. William Bluem
Professor
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem:

I have reviewed your letter of November 8 and would be very much interested in receiving a preview copy of the film BEWARE THE WIND. As you can well imagine, a city such as St. Louis has a desperate need for programming of this type and calibre. I will look forward to hearing from you in the near future.

Sincerely,

Walter Alley
Walter A. Alley
Director of Program Operations

WAA:ds

Copy sent 1/14/69

SAINT LOUIS EDUCATIONAL TELEVISION COMMISSION/6996 MILLBROOK-SAINT LOUIS 63130/VOlunteer 3-0995

9/KETC
SAINT/LOUIS

January 7, 1969

Mr. A. William Bluem, President
Studies in Public Communication
115 Ruth Road
North Syracuse, New York 13212

Dear Sir:

Please book this film for possible use on our educational television station:

Number	Title	Date
	BEWARE THE WIND	for preview & possible telecast when a print is available

In order that it may be screened, timed, and cleaned prior to telecast date, it is important that we receive this film ~~by~~ as soon as possible.

We understand that this film has been cleared for television use. Please advise us if there are any complications concerning music or literary rights, as they must be specifically cleared for television.

Please address this film and all correspondence to KETC, Channel 9, 6996 Millbrook Boulevard, St. Louis, Missouri 63130. The print will be returned via parcel post unless you request other means of transportation.

An early confirmation in writing will be greatly appreciated.

Sincerely,

Kim Brandt

Kim Brandt (Miss)
[redacted]
Film Director

CHANNEL 8 WYES-TV NEW ORLEANS

916 NAVARRE AVENUE
POST OFFICE BOX 24026
NEW ORLEANS, LOUISIANA 70124
PHONE 486-5412, AREA 504

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REVEREND HOMER JOLLEY
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NASH ROBERTS
DONALD F. SCHULTZ
ROY M. SCHWARZ
MRS. PAUL F. SELLEY
LEON E. SONIAT
PERCIVAL STERN
ALLEN J. TILLERY
MERLIN TOUPS
MRS. MORRELL F. TRIMBLE
RICHARD J. VIAL, JR.
SEYMOUR WEISS
ROBERT L. WILLARD

October 11, 1968

Mr. A.William Bluem
Professor
S.I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem

Thank you for your letter regarding the film Beware The Wind. Unfortunately we are not equiped to telecast 35mm film.

Please let us know if this film will be avilable in 16mm as we would then be able to use it.

Sincerely,

Joyce Wazneak
Joyce Wazneak (Miss)
Programming Secretary

GREATER NEW ORLEANS EDUCATIONAL TELEVISION FOUNDATION

Kentuckiana Educational Television Council

WFPK-TV UHF Channel 15

OFFICE OF THE DIRECTOR
2301 Clarendon Avenue
LOUISVILLE, KENTUCKY 40205

COUNCIL MEMBERS
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ALTON ROSS
RICHARD VAN HOOSE

ADMINISTRATIVE OFFICES
RICHARD VAN HOOSE
Council Chairman
KENNETH LAM, Director
BOB RICHARDSON, Producer

October
Seventeen
1968

Mr. A. William Bluem
Professor
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York

Dear Mr. Bluem:

Your letter of September 26 has been referred to me.

Air pollution is certainly a pressing problem which needs more public attention. Therefore, we would like to participate in the "Communications Project" as outlined in your correspondence. Beware the Wind can be scheduled in prime time, however, we are not color capable and, in addition, we have no promotional funds.

We shall await further word from you or the Airlie Foundation.

Sincerely yours,

Gordon Whiteley

Gordon Whiteley
Supervisor of Studio Operations

GW/m

WDSE-TV

**DULUTH-SUPERIOR AREA
EDUCATIONAL TELEVISION
CORPORATION**

210 Bradley Building
Duluth, Minnesota 55802
727-8734

●

OFFICERS
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Arthur C. Josephs, Vice President
Mrs. Thomas M. Spencer, Secretary
Earle Andrea, Treasurer
George A. Beck, General Manager

●

TRUSTEES—May 7, 1968

Class of 1969

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Gallagher, Sister Annella
Harrington, Dr. Vernon A., Jr.
Hoshal, Julian B.
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Kerola, E. N.
Lampman, Mrs. E. C.
Levine, Mrs. Max H.
Lomoe, Orville E.
Pearson, Burt D.
Rasmussen, Dr. L. V.
Salmi, Wilfred W.
Zeller, George C.

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Hitchcock, James P.
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Gray, Clarence W.
Husebo, Dr. Raymond J.
Josephs, Mrs. H. Y.
Kennedy, Clark
Manion, Dr. O. Gayle
Nichols, L. A.
Ponikvar, Miss Veda
Rossman, George A.
Spencer, Mrs. Thomas M.
Swanson, Sam E.

October 22, 1968

Professor A. W. Bluem
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, N. Y. 13212

Dear Professor Bluem:

We would be most happy to schedule the film "Beware the Wind" and the discussion noted in your letter of October 14, 1968.

I regret, however, that we will be unable to schedule it before December since our current programming is completely booked through November.

I shall await further directions from you on the project. We are holding several dates in December but would like to firm up a definite schedule as soon as possible.

Sincerely,

Warren J. Deacon
Program Director

MICHIGAN STATE UNIVERSITY EAST LANSING · MICHIGAN 48823

TELEVISION STATION WMSB

April 16, 1969

Dr. A. Wm. Bluem, Director
Studies in Public Communication
115 Ruth Road
N. Syracuse, New York 13212

Dear Dr. Bluem:

WMSB had to pre-empt the presentation of Beware the Wind on Sunday, March 30 in order to carry the coverage of the Eisenhower Funeral.

The program has been rescheduled for Sunday, May 4 at 4 p.m. and I will return your questionnaires following that presentation.

Sincerely,

Kay

Kay Ingram
Program Manager

THE FLORIDA STATE UNIVERSITY
TALLAHASSEE 32306

UNIVERSITY BROADCASTING SERVICES

October 7, 1968

Dr. A. William Bluem
S.I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Dr. Bluem:

WFSU-TV will cooperate in the Airlie Foundation's communication project in the evaluation of Beware The Wind.

Please supply a screening print of the program.

Sincerely,

Clayton A. Roehl
WFSU-TV Program Manager

CAR: lk

WFSU
TV 11

January 3, 1968

Mr. A. William Bluem
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem:

Enclosed please find critiques sheets on Beware The Wind as completed by the WFSU-TV staff.

The film was broadcast December 17, 1968 at 10:30 p.m. immediately following our regular continuing education medical series: Seminar For Physicians.

Sincerely,

Clayton A. Roehl
Program Manager

CAR:pl

FLORIDA STATE UNIVERSITY BROADCASTING SERVICES 202 DODD HALL TALLAHASSEE, FLORIDA 32306
904 / 599-3406 TWX: 810 931 3633

OHIO
UNIVERSITY
TELEVISION
ATHENS, OHIO 45701 / 594-6171
WOUB-TV CHANNEL 20

November 14, 1968

Mr. A. William Blume,Professor
Studies in Public Communication
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem:

This is in response to your letter of November 6 to Mr. Marshall who is no longer on our staff.

We would be most interested in programming "BEWARE THE WIND", but I doubt that we would be able to schedule it before ~~for~~ mid-January. The reviews of the film are commendable as is the opportunity for an open end treatment of the subject using local panelists. We would be happy to meet the requirements for broadcast which you specified.

I am concerned about some possible problems. First of all, you should know that we are not equipped to broadcast in color at this time. Secondly, in order to do the best possible job with the local segment, we would appreciate receiving a copy of the film at least two weeks in advance for screening.

We will take steps to determine the interest of local medical people after hearing further from you.

Sincerely,

Joseph Welling,
Associate Director of Broadcasting

JW/jn

cc: P. Holmes
L. Michael

learning has no ~~age~~ limit

GEORGIA CENTER For CONTINUING EDUCATION

university of georgia/athens

October 2, 1968

Prof. A. William Bluem
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, N. Y.

Dear Prof. Bluem:

Thank you for your offer of the film BEWARE THE WIND. We would like to broadcast this film on the Georgia Educational Television Network except for 2 qualifications:

1. We can not broadcast 35 mm film

2. Senator Muskie is a political candidate and this precludes our use of the film until after the elections.

Thank you for your interest.

Sincerely,

Hill Bermont

Hill Bermont
Program Director
WGTV

HB/cf

October 8, 1968

Mr. Hill Bermont
Program Director
WGTV
Regents of the University System of Georgia
244 Washington St., S. W.
Atlanta, Georgia 30334

Dear Mr. Bermont:

Thank you for your kind response.

The Airlie Foundation informs me that 16 mm color prints of Beware The Wind are now available. Further, I am also informed that the sequence involving Senator Muskie is not in the actual film, but was an "open-end" presentation done live in Washington, D. C. on the occasion of the premiere telecast of Beware The Wind over WRC-TV in Washington, D. C.

If you were to show this film on the Georgia Educational TV Network, you would of course be free to arrange your own "open-end" segment, or simply to show the 24-minute film itself.

I hope this answers the questions you have raised. I am asking the Airlie Foundation to forward a print for your examination. If you find you can air Beware The Wind, please notify me of your decision at your convenience. Whether you air it or not, I would be anxious to have your judgment of it for my evaluation report.

Yours sincerely,

A. William Bluem
Professor
S. I. Newhouse Communications Center

AWB/gv
cc: Airlie Foundation

Sent [illegible] ack.
request for film
12/[illegible]/68

THE UNIVERSITY OF NEBRASKA
LINCOLN, NEBRASKA 68508

UNIVERSITY TELEVISION
KUON-TV / CHANNEL 12

December 3, 1968

Dr. A. William Bluem
S.I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Dr. Bluem:

Your letter, dated November 8, 1968, has been forwarded to me by Mr. Bill Oxley, Program Manager for KUON-TV. Information contained in your letter applies to programming by our Public Affairs unit.

This station is pivotal transmission point for a nine station educational television network covering all of Nebraska and programming is as diversified as the geographic divisions of the state. The subject of the film referred, Beware the Wind, is one which is certainly topical and of interest to the majority of persons in Nebraska and elsewhere.

I would be happy to cooperate in your evaluation project of the film and would appreciate a screening print sent at your earliest convenience. Tentative discussions with Mr. Oxley concerning Beware the Wind indicate that if the program were scheduled it would, indeed, be in prime evening time. I can assure you also that substantial local promotion would be given the program well in advance in an effort to insure a respectable audience. In this regard, are there any promo kits available on the film?

Regarding the "open-end" segment of the program: because of our administrative and logistic proximity to the University of Nebraska, is my feeling that accredited personnel, both academic and staff, would be readily available and eager to participate in this portion, as well as those involved in various civic centers of our coverage area. I would contact these persons and advise you of their credentials.

Thank you for including Nebraska Educational Television in your project.

Very truly yours,

Joel P. Fowler, Jr.
Senior Producer for
Public Affairs

cc: Bill Oxley

JPF:jke

CENTENNIAL
1869-1969

24
wcny-tv
SYRACUSE **EDUCATIONAL TELEVISION COUNCIL OF CENTRAL NEW YORK**

December 3, 1968

Professor A. William Bluem
S.I. Newhouse Communications Center
Syracuse University
Syracuse, New York

Dear Professor Bluem:

I am in receipt of your letter of November 4 regarding the possible scheduling of the 16 mm documentary film "Beware The Wind."

We would be most interested in viewing a print at your earliest convenience.

Thank you for affording us this opportunity. Hope to hear from you soon.

Sincerely,

Ted

Theodore J. Weinheimer
Program Manager

sm

OLD LIVERPOOL ROAD / LIVERPOOL, NEW YORK 13088 / 315 / 457-0440

WNED-TV

HOTEL LAFAYETTE, BUFFALO, N. Y. 14203 • AREA CODE 716 - 854-4756

November 11, 1968

Professor A. William Bluem
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Professor Bluem:

Thank you for your letter of November 4.

Air pollution is a major problem in our area and it's possible this film might be significant in informing the public.

We would, therefore, be interested in seeing a preview of "Beware the Wind". Having seen it, we could better make a determination on how we wanted to proceed. If you could arrange this, I would appreciate it.

Sincerely,

J. Michael Collins
General Manager

JMC/lgw

NEW YORK STATE'S *first* EDUCATIONAL TELEVISION STATION

CCET/RESEARCH GROUP

A COMMUNICATIONS RESEARCH AND DEVELOPMENT SERVICE OF CENTRAL CALIFORNIA EDUCATIONAL TELEVISION

POST OFFICE BOX 6
SACRAMENTO, CALIFORNIA 95801
(916) 922-6563 • TWX 910-367-3583

October 24, 1968

Prof. A. William Bluem, President
Studies in Public Communication
115 Ruth Road
North Syracuse, New York 13212

Dear Professor Bluem:

We regret that KVIE, educational television, will not be able to participate in the evaluation project on Beware the Wind. We do not have 35 MM capability in our film chain.

If you have 16 MM prints available we would be happy to reconsider your request.

I should point out, however, that we do not originate color and would therefore be broadcasting the film in monochrome. Further we would not be in a position to provide any local promotion or publicity beyond the listings in the local newspapers. We do not have an advertising budget.

Finally, I am interested in the work you are doing in studies of public communication. In addition to my work at KVIE and my activity with CCET/Research Group, I teach courses in politics and mass communication and public opinion at California State College at Sacramento. If there are publications of the Newhouse Center related to this area of politics and public communication I would appreciate a bibliography.

Sincerely,

Lee Nichols
Director

LN/jh

KTWU TOPEKA
Channel 11
TOPEKA, KANSAS 66604 • PHONE CR 2-8181 AC 913 • FIRST IN EDUCATIONAL TV

May 14, 1969

A. William Bluem
S.I. Newhouse Communications Center
115 Ruth Road
North Syracuse, N.Y. 13212

Dear A. William (Bill):

I lied. Beware the Wind has not yet been televised. But it will be. It is scheduled for telecasting for 6:30 p.m., Friday evening, May 16, 1969. We did show a private showing to the State Economic Development Office and the State Pollution Officer. I believe I forwarded to you the letter I received as to their reaction. The general impression, if I recall correctly, was one of modest approval. I believe one fellow said the film was "generally acceptable."

Cordially,

Dale

Dale N. Anderson
Director, Educational Television

pm

Washburn University
of Topeka

STATE OF KANSAS
DEPARTMENT OF ECONOMIC DEVELOPMENT
STATE OFFICE BUILDING, TOPEKA, KANSAS 66612
Phone No. 296-3481

Kansas Economic Development Commission
Leigh Warner
Chairman
Floyd E. Black
Vice-chairman
Rod Dierking
Milo M. Hewitt
Harrison F. Johnson
Jack Kelley
Ben P. Robinson
Thad M. Sandstrom
L. M. Van Doren
Jack Lacy, Director

February 24, 1969

[illegible] [illegible]

[illegible]

Dr. Dale N. Anderson, Director
Educational Television, KTWU-TV
Washburn University
17th & College
Topeka, Kansas 66604

Dear Dr. Anderson:

We have viewed the air pollution film, Beware the Wind, from George Washington University Medical Center and found it interesting, frightening and reasonably up-to-date.

Mr. Howard Saiger, Director, Kansas Air Quality Control Commission also viewed the film with us. I believe Mr. Saiger was impressed and may wish to talk with you about acquiring a copy for the commission. Mr. Saiger's office is at 1025 Kansas Ave., telephone 296-3896.

I am returning the film by parcel post this date. Thank you very much for permitting us to view it.

Sincerely,

Jack Lacy

Jack Lacy
Director

JL:jh

cc: Mr. Howard Saiger

UNIVERSITY OF FLORIDA TELEVISION

uft

October 17, 1968

Dr. A. William Bluem, Professor
S. I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Dr. Bluem:

I am embarassed because so much time has gone since the receipt of your letter regarding the film Beware the Wind. I discover that our preoccupation with the inauguration of the President and beginning of school activities has pre-empted many things including the awareness of some of the important letters on my desk.

You indicate that the film is a 35mm color documentary. If this is it's technical format we would have no capability to show the film. However, if it is on 16mm or tape we would be glad to screen the print or tape and make an airing decision after that. Perhaps my reply has come too late.

I might say that we would expect to have the final decision and handle the details of the closing discussion if we were to run the film. The Medical Society Personnel, while they can contribute from their professional background, still need the guidance and the production decision of our television personnel.

Sincerely,

Ken Christiansen

Kenneth A. Christiansen
Director of Television

KAC/ews
cc: Mark Damen
Program Manager

COLLEGE OF JOURNALISM AND COMMUNICATIONS · 234 STADIUM BUILDING · GAINESVILLE 32601
AREA CODE 904 · 376-3261 · EXT. 2241

12
WHYY-TV
STUDIOS AND OFFICES
4548 MARKET STREET, PHILADELPHIA, PENNSYLVANIA 19139 (215) EV 2-9300
FIFTH AND SCOTT STREETS, WILMINGTON, DELAWARE 19805 (302) OL 4-6255

October 15, 1968

Mr. A. William Bluem
President
S.I. Newhouse Communications Center
115 Ruth Road
North Syracuse, New York 13212

Dear Mr. Bluem:

On October 14, 1968 WHYY-TV aired the film BEWARE THE WIND from 7:30-8:00 PM. Following the filmed portion of the program we had a panel discussion. Participants were: Mrs. Dorothy Cope, Chairman of the Delaware Citizens for Clean Air and Dr. Frank T. O'Brien a member of the Air Pollution Advisory Committee of Newcastle County Medical Society.

We produced this program (the panel segment) in cooperation with Blue Cross and Blue Shield of Delaware.

Sincerely,

J Arthur Stober

J. Arthur Stober
Executive Producer

WHYY, INC ■ WHYY-TV WUHY-TV-FM PUBLIC BROADCASTING

2.

RETURNED CRITIQUE SHEETS
ETV STATION PERSONNEL
EVALUATION

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(✓) Very Well (___) Satisfactorily (___) Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

(___) Very Well (✓) Satisfactorily (___) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(✓) Yes (___) No

Comment: ____________________

4. Which, if any, of the film production techniques used could have been improved?

Intro could be strengthened. Relationship to topic unclear at first.

5. How does this film compare with similar program material from other sources?

(___) EEN Better (___) As Good (___) Worse (___)

(___) NET Better (___) As Good (___) Worse (___)

(___) Other CEN Better (___) As Good (✓) Worse (___)

6. Does the film's length influence your feelings about running it on-the-air?

It provides for a local introduction

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

Doubtful

8. Is the film brought to a suitable summary and close?

Yes

9. Is the subject "air pollution" of interest locally?

Yes

10. Is this the type of film you would want to repeat again during the broadcast week?

Yes

Respondent's Name Joseph Welling, Assoc Director

Station Represented WOUB-TV

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(X) Very Well (___) Satisfactorily (___) Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

(X) Very Well (___) Satisfactorily (___) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(X) Yes (___) No

Comment: ______________________________

4. Which, if any, of the film production techniques used could have been improved?

____

5. How does this film compare with similar program material from other sources?

(___) EEN Better (X) As Good (___) Worse (___)

(___) NET Better (___) As Good (X) Worse (___)

(___) Other ________ Better (___) As Good (___) Worse (___)

6. Does the film's length influence your feelings about running it on-the-air?

Adequate

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

No

8. Is the film brought to a suitable summary and close?

Yes

9. Is the subject "air pollution" of interest locally?

yes

10. Is this the type of film you would want to repeat again during the broadcast week?

Yes

Respondent's Name Juan P. Sparks, Asst. Prog Dir

Station Represented WGTV, U. of Ga. Athens, Ga. 30601

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea of air pollution as more than a local problem?

(☒) Very Well (___) Satisfactorily (___) Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

(☒) Very Well (___) Satisfactorily (___) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(☒) Yes (___) No

Comment: ______________________________

4. Which, if any, of the film production techniques used could have been improved?

Sound mix of other than narrator's voice.

5. How does this film compare with similar program material from other sources?

(___) EEN	NA	Better (__)	As Good (__)	Worse (__)
(___) NET		Better (__)	As Good (☒)	Worse (__)
(___) Other	Comml Nets	Better (__)	As Good (__)	Worse (☒)

6. Does the film's length influence your feelings about running it on-the-air?

Somewhat - easier programming it if 28:50-29:30

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

Not really. May result in negative reaction when he is not seen

8. Is the film brought to a suitable summary and close?

Yes

9. Is the subject "air pollution" of interest locally?

No. Apparently not much feeling that there is air pollution in Tallahassee.

10. Is this the type of film you would want to repeat again during the broadcast week?

No

Respondent's Name Clayton W. Roehl, Pgm Mgr

Station Represented WFSU-TV, Tallahassee, Fla.

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

☑ Very Well ☐ Satisfactorily ☐ Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

☐ Very Well ☑ Satisfactorily ☐ Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

☑ Yes ☐ No

Comment: ____________________

4. Which, if any, of the film production techniques used could have been improved?

____

5. How does this film compare with similar program material from other sources?

☐ ~~CEN~~ CEN	Better ☑	As Good ☐	Worse ☐
☐ NET	Better ☐	As Good ☑	Worse ☐
☐ Other ____________	Better ☐	As Good ☐	Worse ☐

✓ 6. Does the film's length influence your feelings about running it on-the-air?

Yes - Had we not taped an intro, it would have been very difficult to fill that 7 minutes with appropriate material.

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

(a) No "bearing" on promotion - simply mentioned

(b) perhaps we had a larger audience

8. Is the film brought to a suitable summary and close?

yes

9. Is the subject "air pollution" of interest locally?

Regionally (along the river), perhaps - not of great interest locally

10. Is this the type of film you would want to repeat again during the broadcast week?

Was repeated - {Mar 23 at 9:30 p.m. first play
{Mar 27 at 6:30 p.m. repeat

Respondent's Name Lyndal Michael

Station Represented WOUB-TV

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

☒ Very Well ☐ Satisfactorily ☐ Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

☒ Very Well ☐ Satisfactorily ☐ Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

☒ Yes ☐ No

Comment:

4. Which, if any, of the film production techniques used could have been improved?

5. How does this film compare with similar program material from other sources?

☒ EEN Better ☐ As Good ☒ Worse ☐

☒ NET Better ☐ As Good ☒ Worse ☐

☐ Other ____ Better ☐ As Good ☐ Worse ☐

6. Does the film's length influence your feelings about running it on-the-air?

SEE L. MICHAEL'S COMMENTS

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

YES

8. Is the film brought to a suitable summary and close?

YES

9. Is the subject "air pollution" of interest locally?

YES

10. Is this the type of film you would want to repeat again during the broadcast week?

SEE L. MICHAEL'S COMMENTS

Respondent's Name BOB S[illegible]TILI

Station Represented WOUB - TV

[illegible]

[illegible]

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(___) Very Well (✓) Satisfactorily (___) Poorly

2. How well will the first ten minutes of [illegible] hold the TV audience?

(✓) Very Well (___) Satisfactorily (___) Poorly

3. Are the pertinent factors of air pollution developed logically and smoothly in the film?

(✓) Yes (___) No

Comment:______________________________

4. Which, if any, of the film production techniques used could have been improved?

____

5. How does this film compare with similar program material from other sources?

(___) EEN	Better (___)	As Good (✓)	Worse (___)
(___) NET	Better (___)	As Good (✓)	Worse (___)
(___) Other ________	Better (___)	As Good (✓)	Worse (___)

6. Does the film's length influence your feelings about running it on-the-air?

Yes - not regular length

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

I don't know

8. Is the film brought to a suitable summary and close?

Yes

9. Is the subject "air pollution" of interest locally?

Not as much as in other areas

10. Is this the type of film you would want to repeat again during the broadcast week?

Yes

Respondent's Name Mary Ellen Chamberlin

Station Represented KTWU, Topeka

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(✓) Very Well (___) Satisfactorily (___) Poorly

2. How well will the first few minutes of Beware The Wind hold the TV audience?

(✓) Very Well (___) Satisfactorily (___) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(✓) Yes (___) No

Comment: ____________________

4. Which, if any, of the film production techniques used could have been improved?

____

5. How does this film compare with similar program material from other sources?

(___) EEN	Better (___)	As Good (___)	Worse (___)
(___) NET	Better (✓)	As Good (___)	Worse (___)
(___) Other ________	Better (___)	As Good (___)	Worse (___)

6. Does the film's length influence your feelings about running it on-the-air?

Yes -

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

Yes - Being at present time a well known actor would influence a larger audience.

8. Is the film brought to a suitable summary and close?

Very Well

9. Is the subject "air pollution" of interest locally?

Not at present time because of lack of industry

10. Is this the type of film you would want to repeat again during the broadcast week?

Yes

Respondent's Name Ron Bissland

Station Represented WFSU-TV

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

☐ Very Well ☒ Satisfactorily ☐ Poorly

2. How well will the first few minutes of Beware the Wind hold the TV audience?

☐ Very Well ☒ Satisfactorily ☐ Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

☒ Yes ☐ No

Comment: ______

4. Which, if any, of the film production techniques used could have been improved?

Not sure if any more was needed - Production very well done

5. How does this film compare with similar program material from other sources?

☐	EEN	Better ☐	As Good ☐	Worse ☐
☒	NET	Better ☐	As Good ☒	Worse ☐
☒	Other Commercial Network	Better ☐	As Good ☒	Worse ☐

6. Does the film's length influence your feelings about running it on-the-air?

No

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

Not especially -

8. Is the film brought to a suitable summary and close? OK as is with general over view - more specific information could be interesting to groups investigating future activities

9. Is the subject "air pollution" of interest locally?

Not at the present time - No heavy industry

10. Is this the type of film you would want to repeat again during the broadcast week?

YES

Respondent's Name B. L. Pestle

Station Represented WFSU-TV

[illegible]

( ) [illegible] all ✓ [illegible]

[illegible]

( ) [illegible] all ✓ [illegible]

[illegible] pollution [illegible]

(?)

Not ~~forcefully~~ enough (need punchier cause-effect)

[illegible]

Documentary approach to patients in hospital after cancer and/or other surgery

[illegible]

( ) [illegible] ( ) [illegible] ✓ [illegible] ( )

( ) [illegible] ( ) [illegible] (✓)

( ) Other ( ) [illegible] ( )

[illegible] the film's length [illegible] your feelings [illegible]

Yes, should be longer or shorter 14'30 or 29'30

In your evaluation, [illegible] can you [illegible]

NO. He's out of his context, like Eisenhower discussing flower-arranging.

8. Is the film broadcast [illegible] ~~[illegible]~~ SATISFACTORY [illegible] Yes

It's weaker than boarding house "soup" (after all this is a vital subject) treat it as such ... remove it from the "yawn" department. The material is there use it.

9. Is the subject of air pollution of interest [illegible]?

Yes, consequently it deserves punchier approach, crisp, vivid, give stronger case histories.. make viewer angry.. relate more directly.

10. Is this the type of film you would want to [illegible] broadcast [illegible]?

Definitely not — too gutless!

Responsible [illegible] Bob Falkner

Station Represented WOUB-TV

ADDENDUM: The potential is definitely there. Now that the "dry-run" is finished, do it with force & conviction!

Reproduced from best available copy.

[illegible]

[illegible]

1. In your [illegible] air pollution is [illegible] local [illegible]

(___) Very Well　　(X) Satisfactorily　　(___) Poorly

2. How well will the [illegible] hold [illegible] audience

(___) Very Well　　(X) Satisfactorily　　(___) Poorly

3. Are the pertinent [illegible] logically and smoothly in the film?

(X) Yes　　(___) No

Comment:______________________________

4. Which, if any, of the film [illegible] could [illegible] been [illegible]

____

5. How does this film [illegible] from other [illegible]

(___) EFA　　Better (___)　　[illegible] (X)　　Worse (___)

(___) ACT　　Better (___)　　[illegible] (X)　　Worse (___)

(___) Other ______　　Better (___)　　[illegible] (X)　　Worse (___)

6. Does the film's [illegible] your [illegible]

____

7. In your estimation, [illegible] have any [illegible] promotion -- can you expect [illegible] by [illegible]

only slightly

8. Is the [illegible] to [illegible]

O.K.

9. Is the subject [illegible]

Yes – not overly pressing issue though

10. Is the [illegible] type of film [illegible] during [illegible] week?

Not necessarily –

Respondent's name Dale N Anderson, Director

[illegible] KTWU-TV, Channel 11

[illegible] THE SKY

[illegible] THE AIR

1. In your opinion, how does the film convey [illegible] air pollution as more than a local problem?

☑ Very well ☐ Satisfactorily ☐ Poorly

2. How well did the first few minutes of [illegible] the film hold the TV audience?

☐ Very well ☒ Satisfactorily ☐ Poorly

3. Were the pertinent factors in air pollution developed logically and sensibly in the film?

☑ Yes ☐ No

Comments:

4. Which, if any, of the film production techniques [illegible] could have [illegible]

PERHAPS RELIED TOO MUCH ON DRAMATIC MUSIC

5. How does this film compare with similar programs [illegible] from other sources?

☐ EEN		Better ☐	As Good ☐	Worse ☐
☐ NET		Better ☐	As Good ☒	Worse ☐
☐ Other		Better ☐	As Good ☐	Worse ☐

6. Does the film's length influence your feeling about [illegible] it [illegible]

7. In your estimation, will the name "Robert [illegible]" have any bearing in promotion — can you expect a slightly larger audience as a result?

No

8. Is the film brought to a suitable summary and close?

TOO SIMPLE, PERHAPS COULD BE A BIT MORE FRIGHTENING

9. Is the subject "air pollution" of interest locally?

10. Is this the type of film you would want to repeat again during the broadcast week?

Respondent's Name Victor Nunez

Station Represented WFSU-TV

CRITIQUE SHEET

BEWARE THE WIND

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(___) Very Well [✓ Satisfactorily] (___) Poorly

2. How well will the first few minutes of Beware the Wind hold the TV audience?

(___) Very Well (___) Satisfactorily [✓ Poorly]

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(___) Yes [✓ No]

Comment: The extreme increase in cost with increasing population must be included.

4. Which, if any, of the film production techniques used could have been improved?

5. How does this film compare with similar program material from other sources?

(___) EEN Better (___) As Good (___) Worse (___)
(___) NET Better (___) As Good (___) Worse (___)
(___) Other ____________ Better (___) As Good (___) Worse (___)

6. Does the film's length influence your feelings about running it on-the-air?

No

7. In your estimation, will the name "Robert Preston" have any bearing in promotion -- can you expect a slightly larger audience as a result?

NOT NECESSARILY

8. Is the film brought to a suitable summary and close?

Again, the great cost vs. population should be shown.

9. Is the subject "air pollution" of interest locally?

The actual problem does not exist here

10. Is this the type of film you would want to repeat again during the broadcast week?

Probably

Respondent's Name CALVIN H. BALOUN
Station Represented WOUB-TV (ATHENS, OHIO)

Reproduced from best available copy.

[illegible] SHEET

BEWARE THE AIR

1. In your opinion, how does the film convey the idea that air pollution is more than a local problem?

(✓) Very well (___) Satisfactorily (___) Poorly

2. How well will the first few minutes of Beware the Air hold the audience?

(___) Very well (___) Satisfactorily (✓) Poorly

3. Are the pertinent factors on air pollution developed logically and smoothly in the film?

(✓) Yes (___) No

Comment: ______________________________

4. Which, if any, of the film production techniques used could have been improved?

Better interviews

5. How does this film compare with similar program material from other sources?

(___) EEN Better (___) As Good (___) Worse (___)

(___) NET Better (___) As Good (✓) Worse (___)

(___) Other CBS Better (___) As Good (___) Worse (✓)

6. Does the film's length influence your feeling about running it on-the-air?

____

7. In your estimation, will the name "Robert Preston" [illegible] any [illegible] in promotion -- can you expect a slightly larger audience as a result?

No.- He's not that well know locally

8. Is the film brought to a suitable summary and close?

Fair

9. Is the subject "air pollution" of interest locally?

No

10. Is this the type of film you would want to repeat again during the broadcast week?

Yes.

Respondent's Name W. Wayne Godwin

Station Represented WFSU

THE DISSEMINATION
OF
BIO-MEDICAL INFORMATION
BY
AUDIO-VISUAL MEANS

****

AN
EVALUATION OF A SELECTED DISSEMINATION PLAN AND VIEWER RESPONSE FOR THE FILM, EAGLE'S LAMENT

Prepared for the
Airlie Foundation of
The George Washington
University Medical Center
by
Studies in Public Communication

EVALUATION PROJECT
STAFF

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PART I

ETV DISSEMINATION OF

EAGLE'S LAMENT ---

EVALUATION OF A SELECTED PLAN

DATA FOR THIS SECTION INCOMPLETE -- FINAL REPORT, THIS PHASE OF STUDY, TO BE SUBMITTED BEFORE SEPTEMBER 15, 1969

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PART II

SECTION "A"

OVERVIEW OF RESULTS

I EAGLE'S LAMENT IS A REMARKABLY EFFECTIVE TEACHING INSTRUMENT. TESTING OF VARIOUS INDIVIDUALS AND GROUPS REVEALS A SIGNIFICANT INCREASE IN KNOWLEDGE OF SALIENT FACTS ABOUT AIR POLLUTION AS A DIRECT RESULT OF HAVING VIEWED THE FILM.

II ALL SUBJECTS TESTED TENDED TO REGARD AIR POLLUTION AS A MORE SERIOUS SOCIAL CONCERN AFTER SEEING EAGLE'S LAMENT. GENERALLY, MORE MATURE VIEWERS (HIGH SCHOOL TEACHERS) SEEM LESS SWAYED BY EAGLE'S LAMENT THAN WERE COLLEGE-AGE STUDENTS. ON THE OTHER HAND, THE SELECTION OF NARRATOR WAS MORE SATISFYING TO MATURE VIEWERS.

III YOUNGER VIEWERS INDICATE SOME DISSATISFACTION WITH THE AVENUES FOR ACTION WHICH EAGLE'S LAMENT POSED FOR THEM. WHILE NOT SIGNIFICANT AT THIS STAGE, THE EXPRESSED REACTIONS OF COLLEGE STUDENTS SUGGESTS THE POSSIBILITY THAT FILMS OF THIS TYPE MAY ACTUALLY PRODUCE THE DYSFUNCTIONAL EFFECT OF VIEWER RESIGNATION ("THE PROBLEM IS TOO BIG," "HOW CAN I DO ANYTHING ABOUT AIR POLLUTION?", ETC.) IF POSITIVE COURSES OF ACTION ARE NOT CLEARLY SPELLED OUT.

I

INTRODUCTION

Upon the conclusion of the survey for Beware The Wind, the Airlie Foundation requested that an additional study be conducted on a subsequent film dealing with the same subject, Eagle's Lament. The research team elected to secure a computer statistical analysis in order that they might make inferences from the study populations to larger populations of viewers throughout the country. As we began this phase of study, the following questions were of particular interest:

1. Is there any statistical difference between the means of the study groups?
2. If so, what is the magnitude of such change and what is its direction?
3. What general inferences that can be drawn from the data would allow us to infer certain reactions among the general populace?

It was also thought important to record the verbal reactions of each treatment group at the conclusion of the film showing. These reactions, carefully recorded by a secretary, form Section IV below. These sessions were designed to reveal certain information not gathered by the testing instrument. The researchers were particularly interested in impressions of general film technique, the effective use of color, the personality of the narrator, the non-visual aspects of sound (both narration and music), the pacing of the film, and -- finally -- general reactions to film effectiveness. These are noted in Section IV.

In general design, the quantitative measurement aspects of the study involved three groups of individuals from varying environments and situations -- each of whom took a test to determine his ability to answer certain questions prior to seeing Eagle's Lament. Immediately following the conclusion of this pre-test, the individuals saw the film in color on a large front screen in a darkened room. Upon conclusion of the film, the three groups were tested again with a similar instrument. In no case were the individuals told that they were to be re-tested at the conclusion of the film. Instead, the film was merely introduced as a new, unreleased television documentary, produced by the Airlie Foundation and narrated by Arthur Godfrey. Further information about the film was not given until after the post-test and discussion.

II

THE TREATMENT GROUPS

The research team made an effort to include as broad a spectrum of students as was possible within the Radio-Television Department at Syracuse University. Sixty-two (62) undergraduates registered in Radio-Television course, TVR-245 (Writing and Announcing for Television) were selected first. The laboratory scheduling for this course made it desirable to use this group, since on Fridays of each week these students appeared for laboratory sections at 9:00, 10:00, 11:00 and 12:00 a.m.

On April 18, 1969, the testing was administered to this group. Each section was cautioned not to relate the happenings of that hour to students in the next, or any of successive, hour. The testing was directed by James R. Treble, Instructor at the Television Center, Syracuse University, in Studio C, a large radio studio in the WAER Radio Building. This room is comfortable, can be completely darkened, and is eminently suitable for the screening of films. Class attendance was normal, with a few students missing due to illness and other personal matters. Each session was concluded without incident, according to plan. The students in this TVR course (245) comprised Group I.

It was also felt that at least one of the groups represented in the study should constitute a sample taken from the broader educational community. Accordingly, Mr. Robin Sandefur -- Coordinator of Educational Television for the Instructional Communications Center of the Liverpool, New York, Central School District -- arranged for a test to be administered during the first part of a faculty meeting conducted in the Liverpool High School.

This session began at 2:30 p.m. on April 23, 1969. Thirty-two (32) people were present, ranging in ages from 23 to 56. All teachers in the ninth, tenth, eleventh or twelfth grades were in attendance -- representing the following academic fields: mathematics, social science, natural science, business education, languages, driver training, gym, music and art. Some guidance personnel and special subjects teachers also attended. Together these subjects comprised Test Group II.

The meeting was convened in one of the larger instructional resource rooms. The group was comfortable and at ease here. Refreshments were not served, but participants were allowed to smoke. The seating was comfortable and the room well equipped for audio-visual purposes. This treatment group viewed the film under optimum conditions, in color on a large front screen. The session was initiated and concluded without incident.

Test Group III, also composed of University students, included 35 undergraduate and graduate students enrolled in TLV 555 -- titled "Studio Operations." TLV 555 is a basic television production course offered at Syracuse University. The film was shown in the course of a two-hour session conducted by James R. Treble in the absence of the regular instructor, Mr. Richard Barnhill. The first portion of the session was concerned with basic filming techniques which logically led during the second hour into the showing of *Eagle's Lament* as an example of recent and unreleased film production. Several students were attending a guest lecturer seminar on that day so the total course enrollment was not present to view the film. This meeting was convened in Room 107 of the Carnegie Library on the Syracuse University campus at 9:00 a.m. on May 6, 1969. The treatment was administered without incident.

III

THE TESTING INSTRUMENT AND ANALYSIS PROCEDURES

The Test Instrument

The basic testing instrument consisted of ten multiple distractor questions, so framed as to test cognitive information gain. The film was viewed six times in succession by the researchers. After each screening, questions which reflected the cognitive content of the film were devised. From the list of questions, ten were selected on the basis of importance and their clarity of presentation in the film. These questions were then assigned a random ranking, one through ten. Five appropriate distractors were selected for each multiple choice question.

The first question deals with the name of the city which -- according to the film, was troubled less by air pollution. Considerable time and explanation was given in the film content to the air conditions which surround Miami, Florida. The four other distractors selected were Denver, Portland, Gary, and Dallas. Question two deals with another strong point made by the film -- that every mile of highway consumes 50 acres of good soil. Test subjects had the reasonable and suitable choices of these four other distractors -- 5, 10, 25 and 100 acres of good soil. In another segment, the film gives important stress to how increasing population contributes to air pollution in the world. Question three deals with the prediction made in Eagle's Lament that by the Twenty-first century there will be eight billion people in the world. The distractors selected were five, twelve, fifteen and seventeen billion people.

Eagle's Lament also contains several references to the role of the automobile in the pollution of air, among them the alarming statement that "this year ten million automobiles will be produced and five years from now that number will increase by 50 per cent". Distractors of 25, 35, 65 and 90 per cent were selected as appropriate to a question which covered this statement. Continuing its examination of the automobile-population problem, the film's narration noted that today one car is produced for every two people living in the United States. To test this factor, other distractors of four, six, three and ten were included. These would all seem reasonable to a person who had not viewed the film. The film also based major visual emphasis on the exhaust systems of many automobiles. During one sequence, the statement that unburned hydrocarbons from the exhaust of automobiles form a major component of smog was made. This seemed to be still another relevant and important consideration, and so this fact was framed into question seven. Other possibilities for the answer were given as hydrofluoride, ozone, methane gas, and sodium oxide. It was also pointed out that each year we produce "more cars than people". This was framed into question eight and the possible distractors included TV sets, watercraft, refrigerators and radios.

Mr. Godfrey, who appears as narrator in Eagle's Lament, has long been associated with airplane flight. Early in the film he states that today commercial airline pilots fly as high as they can to escape the effects of air pollution -- another strong point illustrating the dangers of the height of air pollution. The statement was incorporated into question five. Other, seemingly correct answers to the question "Airplane pilots fly at which of the following altitudes to escape air pollution?" were: "just under the cumulus layer"; "below the pollution layers"; "as low as possible," and "depends on storm conditions."

Stress is placed upon the fact that air pollution is found in unusual areas; hence question number nine which asks, "Even air over which of the following is becoming polluted?". The proper response is "the polar region." Other distractors here are: northern Africa, the oceans, South America and New Zealand. Finally, Mr. Godfrey makes a point of giving us additional examples of how air pollution affects not merely our bodies, but the property around us as well. Of particular interest and emphasis was the visual and aural example of how Cleopatra's needle in New York City has been worn away by the pollution in prevailing winds. This formed the content of question ten. The other distractors were: asphalt roadways, house paint, road signs, and surface soil.

These, then, became the ten questions to be used in the pre and post-tests to measure cognitive information. A copy of the survey sheet follows.

Survey - Eagle's Lament

1. Which of the following cities has less air pollution?

    1. Denver 2. Portland 3. Gary 4. Miami 5. Dallas

2. Every mile of highway consumes about how many acres of good soil?

    1. 5 2. 10 3. 25 4. 50 5. 100

3. By the 21st Century how many people will there be in the world?

    1. 5 billion 2. 8 billion 3. 12 billion 4. 15 billion 5. 17 billion

4. This year ten million automobiles will be produced; five years from now that number will increase by what per cent?

    1. 25% 2. 35% 3. 50% 4. 65% 5. 90%

5. Airplane pilots fly at which of the following altitudes to escape air pollution?

    1. as high as they can 2. just under the cumulus layer 3. below the pollution layer

    4. as low as possible 5. depends on storm conditions

6. Today one car is produced for every how many people living in the United States?

    1. 4 2. 6 3. 3 4. 10 5. 2

7. Which of the following is a major component of smog?

    1. hydrocarbons 2. hydrofluoride 3. ozone 4. methane gas 5. sodium oxide

8. Every year we produce more what than people?

    1. TV sets 2. cars 3. water craft 4. refrigerators 5. radios

9. Even air over which of the following is becoming polluted?

    1. Northern Africa 2. the oceans 3. South America 4. New Zealand 5. polar regions

10. Which of the following is most startlingly worn away by the air pollution in prevailing winds?

    1. asphalt roadways 2. house paint 3. stone monuments 4. road signs 5. surface soil

ALL ANSWERS STRICTLY CONFIDENTIAL THANK YOU VERY MUCH

Analysis Procedures

All respondents in the three groups indicated their answers on standard IBM score sheets. These sheets are arranged so that the answers may be scored by an electronic device, and the scores punched on IBM unit record cards. There are two sheets for each respondent; one for a pre-test and another, the post-test. The IBM score sheets contain an identification key at the top of the page. Respondents were asked to enter the number of their group in Line 1; whether they were male or female in Line 2; and in Line 3 whether they were an undergraduate or graduate student, or from the community. Line 4 was an indicator as to whether the respondent was a freshman, sophomore, junior, senior, or teacher; Line 5 was for the indication of major. Those available for choice were television-radio, advertising, speech, education or other. A sixth line was included for a personal reaction by each respondent. On the question of "Your rating of the importance of air pollution," with the No. 1 being "Very Important," to No. 10, "Not Important." An analysis of this particular line follows in the conclusions.

The Psychology Department, Room 215, Sims Hall, Syracuse University, undertook the electronic scoring of the test data. Their equipment transferred the scored test results to standard IBM unit record cards. This department, using existing and frequently used computer programs, formed the analysis on these data. The first analysis was a factor analysis, accomplished on the Syracuse University main computer -- an IBM 360 - housed in Machinery Hall on the Syracuse University Campus. This analysis was to indicate the total number of responses in the pre and post tests to each of the distractors in each of the ten questions;

plus the mean and standard deviation. A subsequent analysis broke down the total group by section and by male or female. Next, a statistical inferential test was applied to the data to determine if a significant difference in scores occurred between the groups and then, and most importantly, between the pre and post tests.

A third computer run was made to determine any possible correlations between responses in the pre and post test.

IV

QUALITATIVE REACTIONS

As part of treatment procedure for all three study groups, a discussion was held at the conclusion of the post-test. IBM scoring sheets were collected and secured, a general discussion atmosphere was established, and the discussion initiated with the lead question, "What are your general reactions to the film?"

The Group I students enrolled in Television-Radio Course TVR 245 were tested in a number of consecutive sessions in one morning. Since all of these students comprised only one treatment group, their reactions to the film are not separated by section in the discussion here. Instead, their responses have been collapsed into the discussion which follows.

First responses to the initial question resulted in the following generalized expressions:

1. "I like the film."
2. "I thought we had other more significant social problems."
3. "The problem is immense."
4. "The problem is too big. How can we ever clean up all that air?"

The initial reactions of Group I tended to center around two of the above; first, they did not know that the problem was as large or as serious as it is -- and second, the magnitude of the air pollution problem seemed so large that potential solutions were restricted by the enormity of the pollution already in the air.

The question was then asked, "Does the film tell the story of air pollution effectively?" The general reaction here was "yes."

It was felt that the visuals -- especially those illustrating the creeping clouds of poisonous or obnoxious fumes -- tended to illustrate very strongly the evils of airborne contaminants. Mentioned as being "of particularly high visual impact" were the scenes of high level aircraft flying through layers of air pollution, and scenes which graphically illustrated haze, smoke, air pollutants in the atmosphere itself, and the obscuring of background objects.

Several students then commented on other scenes in the film which they thought added or detracted from the general combination of thoughts comprising the theme. Most often mentioned was the scene of the airline pilots discussing the condition of the air in which they fly and of the various contaminant levels in various parts of the country. This treatment group indicated that they thought this scene was contrived, that it was unnatural in the setting in which it was photographed and that perhaps the photographic technique itself seemed to be controlling the situation. Others could not believe that several airline pilots talking together in a lounge would dwell on such topics as troubles in the family's garden patch. Other students commented that a great deal of emphasis was placed in the film on the problem of air pollution caused by contaminants from automobile exhausts. They felt that other sources of atmospheric contaminants -- particularly the smoke waste from industry -- should be examined and put into proper perspective alongside the automobile.

Many members of this group (I) acknowledged the effective use of color in dramatizing certain levels of contaminant in the air. They felt that the contrast between clear air and polluted air could be seen clearly. Several commented on the use of what they termed a melodramatic opening to the film. They described the opening sequences as quite long and that the singing of "America The Beautiful" continued on past the "bearable stage." Others concurred at this point, indicating that they had gotten the message rather quickly and that while the opening film sequences were beautifully photographed, the sequence did become "boring" and "somewhat dull." Others used the word "monotonous" and repetitive."

Subjects in Group I, because they are enrolled in a course which stresses performance techniques for television and film, commented on the lack of eye contact between Mr. Godfrey and the camera lens. It appeared to many -- more than the majority -- that Godfrey was indeed reading from cue cards placed beside the camera, but off camera. Some indicated that this was a distraction to them as they were accustomed to having the narrator look at them continuously as he spoke.

There was general agreement within the group, however, that Arthur Godfrey was an excellent choice for narrator of this film -- particularly because there was a thematic tie in the copy between flying and air pollution. Many indicated that Mr. Godfrey has been known for years as a flyer. (While the mean age of this treatment group would have precluded their hearing his early broadcasts in which he described his flying activities, they were aware that he was known for this activity.) They commented further that Mr. Godfrey has the kind of personality and delivery style which lends credibility to any subject. They note that he has a particular delivery style which he tends to use frequently in the delivery of commercial messages. It was added that he seems to be able to convince people of almost anything.

The discussion concluded in each of the sections of Group I with the question, "Did the film motivate you to action?" The general reaction here, again, was "Yes, it did motivate to action," but they were unsure of what to do. Several subjects indicated that while there was a mention of writing to your state and national legislators, other specific avenues of action were not mentioned or explained. One viewer likened the situation to an epidemic of the plague, when everybody recognizes the problem but no one knows how to stop it. Many others were quick to agree that the film lacks specific suggestions which could provide specific motivation to the viewer. This group clearly did not know where to turn, they acknowledged the problem, its magnitude and its importance, but were not able to formulate a path to action.

Group II, the teachers at Liverpool High School, Liverpool, New York, also engaged in a limited discussion at the conclusion of their post-test. The discussion was necessarily limited by the length of time assigned to the entire testing project. Here, about six minutes was left for the discussion program. Mr. Sandefur began with the initial question. There followed a pause of almost 30 seconds in which no comments were made. Finally, one person ventured back, "There are other more pressing problems on us today than what's in the air." Several then commented about local air pollution problems in terms of smoke and fumes blowing into this area from a nearby industrial complex. This discussion was terminated when another subject indicated that she thought Mr. Godfrey was "wonderful." in the film. This subject went on to say that she had listened to Mr. Godfrey for many years and that "if Mr. Godfrey said the problem was acute, it was acute." She continued that the film certainly illustrated the points that he was making about the magnitude of the air pollution problem. Several others commented at this time that the aerial views taken from airplanes was an effective way to show the air pollution problem. Perhaps they meant that the wide angle shots, encompassing much more territory, indicated pollutants in the air more clearly.

Mr. Sandefur concluded with the question, "Is the film effective in stimulating an audience to action?" The reaction here was either silence or a few yes's. Further discussion was not forthcoming. Mr. Sandefur did observe a noticeable change in attention level when Mr. Godfrey appeared on the screen. He reported that fidgeting and noises from the group greatly diminished upon Godfrey's entrance.

Group III (graduate and undergraduate students taking the Studio Operations Television Production Course) also contributed comments upon the completion of their post-tests. One of the first reactions in the ensuing discussion was that "Mr. Godfrey was reading from cue cards." Another commented that he had lost eye contact frequently and seemed to be reading from cue cards from two sources -- those in his lap and those to the right of the camera. Others agreed, but some said they had not noticed it at all.

A number of students in this group then commented on how effectively what was said was illustrated by visual elements. Others expressed negative criticism to the airline pilots talking together in the lounge. They thought that this scene was unnatural, and carried the impression that it was rehearsed or "at best" staged. They indicated that they would have thought the scene more believable if it had occured outdoors in the airport environment, and in a more frank and casual manner. Discussion was lively on this point, with the concensus being that it did indeed appear to be staged footage. Several commented on the content of the conversation as being very unlike airplane pilots. Several thought there were many -- too many -- shots of passing automobiles spewing forth their unburned hydrocarbons. It was felt that the cinematographer should have had more variety in these types of shots -- that, again, too much emphasis was placed upon the automobile as a creator of air pollution.

Others in the group commented upon the excellent selection and mixing of the music elements in the film. They particularly excluded the opening America The Beautiful but included the musical bridges and segments within the film that in many cases provided a transition from one sequence of events to another.

This third group also responded in much the same way as the first in that they indicated that the film left very few avenues of action open to them, and that they were unsure of what action to take in trying to clean up air pollution.

In summary, it is clear that production students are more sensitive to minor details of production than the general audience member would be. There is also some indication that Godfrey has greater appeal to older (mid-'30 and up) members of an audience. It can also be said that the film seemingly accomplished the first step in achieving an ultimate solution to the air pollution problem -- that of creating interest in finding a solution. On the other hand, if the tendency on the part of some viewers to regard the problem as "too big" to be corrected became too strong, the film could have an opposite effect from what was intended. It would seem, however, that the dominant response was one of seeking a solution rather than resignation.

V

QUANTITATIVE RESULTS

Factor Analysis

In the factor analysis of each of the questions in the *Eagle's Lament* survey, the magnitude of change between the pre and post test became evident. This information is summarized and presented in Tables 1 through 10. Supportive evidence in the form of computer read-out can be found in the Appendix to the study.

Table 1 indicates the percentage of all three groups responding to each distractor in Question 1, both in the pre and post test. The question was, "Which of the following cities has less air pollution?" In Group I the males tended to think that Denver and Portland were the cities with less air pollution. These responses occured in the pre-test, but at the conclusion of the post-test, 100 per cent of the respondents indicated that distractor 4 -- Miami -- was the correct response. The females in Group I tended to think that Denver, Gary or Miami were better responses, but in the post-test for this group, 94 per cent switched to Miami and 6 per cent indicated Dallas. In Group II, males, they were almost evenly divided between four responses; Denver, Portland, Gary and Miami. 33 per cent of these males thought the correct response was Denver. In the post-test, however, 100 per cent of the males in Group II changed their response and indicated Miami as the correct response. By and large, the females in this group thought that Denver was the correct response. In the post-test, 94 per cent of the females in this group indicated Miami as the correct response and 5 per cent continued to indicate Denver. In the Group III pre-test (males and females together) 40 per cent thought that Denver was the correct response; 30 per cent thought Portland was the correct response; 10 per cent for Gary, Indiana; 15 per cent for Miami, and 5 per cent for Dallas. Everyone changed his response on the post-test, and 100 per cent indicated that Miami was the correct response to Question 1.

WHICH OF THE FOLLOWING CITIES HAS LESS AIR POLLUTION?

		1. Denver	2. Portland	3. Gary	4. Miami	5. Dallas
Group One	Male	Pre = 55 Post = 0	Pre = 32 Post = 0	Pre = 5 Post = 0	Pre = 9 Post = 100	Pre = 0 Post = 0
	Female	Pre = 37 Post = 0	Pre = 6 Post = 0	Pre = 25 Post = 0	Pre = 25 Post = 94	Pre = 6 Post = 6
Group Two	Male	Pre = 33 Post = 0	Pre = 25 Post = 0	Pre = 17 Post = 0	Pre = 25 Post = 100	Pre = 0 Post = 0
	Female	Pre = 56 Post = 6	Pre = 22 Post = 0	Pre = 6 Post = 0	Pre = 17 Post = 94	Pre = 0 Post = 0
Group Three	Male & Female	Pre = 40 Post = 0	Pre = 30 Post = 0	Pre = 10 Post = 0	Pre = 15 Post = 100	Pre = 5 Post = 0

TABLE 1
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 1. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 2 indicates the percentage of subjects in all groups responding to each distractor in Question 2 included in the pre and post test. They were responding to the question, "Every mile of highway consumes about how many acres of good soil?" In Group I the males indicated a pre-test response of 27 per cent for distractor 2 and 32 per cent for distractor 3, both incorrect answers. At the conclusion of the post-test, 100 per cent of the group was indicating 4 --(50) as the correct response here. In the pre-test, females in this group tended to think that response 1 (5) and response 3 (25) were the correct responses, but in the post-test, 87 per cent indicated distractor 4 (50) as the correct answer, with the additional 12 per cent indicating distractor 5 (100). In Group II the males were almost evenly divided between distractors 1, 3, 4 and 5 in the pre-test. In the post-test, however, 92 per cent indicated the correct response of 50, while 8 per cent continued to think of distractor 2 (10). Females in Group II were almost evenly divided between distractors 2, 3, 4 and 5 in the pre-test. In the post-test situation 78 per cent indicated item 4 (50) as the correct response. A few continued to respond to distractors 1, 2 and 3. Group III (combined males and females) again showed an almost even pre-test division between distractors 2, 3 and 4. In the post-test, however, it is interesting to note that everyone — 100 per cent of the group -- indicated 4 as the correct response. A comparison in the groups of the pre and post tests indicates quite clearly that there is learning being accomplished during the film, and that this particular point was effectively made.

EVERY MILE OF HIGHWAY CONSUMES ABOUT HOW MANY ACRES OF GOOD SOIL?

		1. 5	2. 10	3. 25	4. 50	5. 100
Group One	Male	Pre = 5	Pre = 27	Pre = 32	Pre = 14	Pre = 18
		Post = 0	Post = 0	Post = 0	Post = 100	Post = 0
	Female	Pre = 37	Pre = 12	Pre = 31	Pre = 6	Pre = 12
		Post = 0	Post = 0	Post = 0	Post = 87	Post = 12
Group Two	Male	Pre = 25	Pre = 0	Pre = 25	Pre = 33	Pre = 17
		Post = 0	Post = 8	Post = 0	Post = 92	Post = 0
	Female	Pre = 6	Pre = 17	Pre = 28	Pre = 28	Pre = 22
		Post = 6	Post = 11	Post = 6	Post = 78	Post = 0
Group Three	Male & Female	Pre = 5	Pre = 25	Pre = 20	Pre = 35	Pre = 15
		Post = 0	Post = 0	Post = 0	Post = 100	Post = 0

TABLE 2
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 2. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 3 indicates percentage of subjects in all groups responding to each distractor in Question 3 in both the pre and post-test. The question was "By the 21st Century how many people will there be in the world?" The correct response is distractor 2 -- (8 million). In Group I, males taking the pre-test scored distractors 1 and 3 most heavily, but in the post-test 86 per cent indicated the correct response, 2. The females in the same group most often scored distractors 3 and 4 as initial correct responses, but in the post-test 100 per cent of this group indicated the correct response, 2. In Group II 42 per cent of the males chose the correct response on the pre-test. 33 per cent chose distractor 1 and a few indicated distractors 3 and 4. In the post-test the 42 per cent figure was increased to 92 per cent. The females in this same group were almost evenly divided between the five distractors on the pre-test, with only 17 per cent indicating the correct response. In the post-test, however, 83 per cent gave the correct response. Forty per cent of males and females combined in Group III indicated a pre-test preference for distractor 2, 35 per cent selected distractor 3, and lesser percentages opted for distractors 4 and 1. In the post-test, 85 per cent indicated the correct response. Response to this question tends to indicate that people did pick up this information from the film but it was perhaps not as easily remembered as some of the other major points in the film.

BY THE 21ST CENTURY HOW MANY PEOPLE WILL THERE BE IN THE WORLD?

		1. 5 billion	2. 8 billion	3. 12 billion	4. 15 billion	5. 17 billion
Group One	Male	Pre = 27 Post = 5	Pre = 14 Post = 86	Pre = 27 Post = 9	Pre = 18 Post = 0	Pre = 9 Post = 0
	Female	Pre = 6 Post = 0	Pre = 0 Post-= 100	Pre = 44 Post = 0	Pre = 37 Post = 0	Pre = 12 Post = 0
Group Two	Male	Pre = 33 Post = 8	Pre = 42 Post = 92	Pre = 8 Post = 0	Pre = 8 Post = 0	Pre = 0 Post = 0
	Female	Pre = 22 Post = 0	Pre = 17 Post = 83	Pre = 22 Post = 0	Pre = 22 Post = 11	Pre = 17 Post = 6
Group Three	Male & Female	Pre = 5 Post = 15	Pre = 40 Post = 85	Pre = 35 Post = 0	Pre = 20 Post = 0	Pre = 0 Post = 0

TABLE 3
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 3. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 4 indicates the percentage of subjects in all groups responding to each distractor in Question 4, in pre and post-test. The question was "This year ten million automobiles will be produced; five years from now that number will increase by what per cent?" The correct response here is distractor 3 (50%). In Group I male choices were almost evenly distributed between distractors 1, 2 and 3, but in the post-test 95 per cent were indicating the correct response. Fifty per cent of the females in this group selected distractor 1 as the correct response in the pre-test, while 25 per cent opted for distractor 2, 19 per cent for distractor 3, and 6 per cent for distractor 4. In the post-test situation, 94 per cent had switched to the correct response. A few more (6%) were still indicating distractor 2 as the correct response. Of the males in Group II, 25 per cent chose item 2, 25 per cent item 3, and 33 per cent item 4 in the pre-test. In the post-test, 92 per cent made the correct response, and 8 per cent continued with distractor 2. Of the females in this group, 39 per cent made correct response of item 3 in the pre-test, and other popular distractors 2 and 4. In the post-test, 89 per cent of the females were indicating the correct response, while approximately 6 per cent chose distractors 2 and 5. Fifty per cent of the combined Group III were indicating the correct response in the pre-test, with lesser percentages electing items 1 and 3, and 10 per cent choosing item 4. In the post-test for this group, 90 per cent indicated the correct response of item 3 and the additional 10 per cent continued on item #2. It would seem that here, too, the film did tend to change people's cognitive information background, and that they were able to recall this data from the film.

THIS YEAR TEN MILLION AUTOMOBILES WILL BE PRODUCED; FIVE YEARS FROM NOW THAT NUMBER WILL INCREASE BY WHAT PER CENT?

			1. 25%	2. 35%	3. 50%	4. 65%	5. 90%
Group One	Male	Pre	36	27	36	0	0
		Post	5	0	95	0	0
	Female	Pre	50	25	19	6	0
		Post	0	6	94	0	0
Group Two	Male	Pre	8	25	25	33	0
		Post	0	8	92	0	0
	Female	Pre	6	28	39	17	11
		Post	0	6	89	0	6
Group Three	Male & Female	Pre	20	50	20	10	0
		Post	0	10	90	0	0

TABLE 4
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 4. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 5 indicates the percentage of subjects in all groups responding to each distractor in Question 5 in pre and post-test. The question was "Airplane pilots fly at which of the following altitudes to escape air pollution?" The correct response was item 1 (As high as they can). In Group II the males pre-tested indicated the 5th choice as the most popular -- 50 per cent recording here. 23 per cent indicated distractor 2 and 18 per cent favored distractor 1. In the post-test 95 per cent were indicating the correct response, and an additional 5 per cent indicated distractor 2. The females in this group also chose 5 as the most popular (56%) distractor. The second most popular response (with 31 per cent) was item 2. In the post-test situation, 94 per cent were indicating the correct response, and 6 per cent continued to select distractor 5. In Group II the males again favored distractor 5, with 50 per cent indicating this as the correct response in the pre-test. 25 per cent selected distractor 2, and 17 per cent chose 3. In the post-test situation, 92 per cent gave the correct response and an additional 8 per cent selected No. 2. Of the females in this group, 39 per cent indicated the correct response, 17 per cent distractor 2, 11 per cent distractor 3 and 33 per cent distractor 5. In the post-test situation, a significant change was recorded with 83 per cent indicating the correct response. 11 per cent continued to indicate that distractor 5 was the correct response. The most popular response to this question in the Group III pre-test was item 2 (35 per cent) followed by 5 (30 per cent) and 1 (25 per cent). In the post-test situation, 95 per cent made the correct response, while 5 per cent continued to indicate item 4. Again, there is a significant switch from other distractors to the correct distractor following the treatment.

AIRPLANE PILOTS FLY AT WHICH OF THE FOLLOWING ALTITUDES TO ESCAPE AIR POLLUTION?

		1. As high as they can.	2. Just under the cumulus layer.	3. Below the pollution layers.	4. As low as possible.	5. Depends on storm conditions.
Group One	Male	Pre = 18 Post = 95	Pre = 23 Post = 5	Pre = 9 Post = 0	Pre = 0 Post = 0	Pre = 50 Post = 0
	Female	Pre = 6 Post = 94	Pre = 31 Post = 0	Pre = 6 Post = 0	Pre = 0 Post = 0	Pre = 56 Post = 6
Group Two	Male	Pre = 0 Post = 92	Pre = 25 Post = 8	Pre = 17 Post = 0	Pre = 8 Post = 0	Pre = 50 Post = 0
	Female	Pre = 39 Post = 83	Pre = 17 Post = 0	Pre = 11 Post = 0	Pre = 0 Post = 0	Pre = 33 Post = 11
Group Three	Male & Female	Pre = 25 Post = 95	Pre = 35 Post = 0	Pre = 5 Post = 0	Pre = 5 Post = 5	Pre = 30 Post = 0

TABLE 5
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 5. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 6 indicates the percentage of subjects in all groups responding to each distractor in question 6 in both the pre and post-test. The question was "Today one car is produced for every how many people living in the United States?" The correct response is distractor 5 (2). Group I male selections were almost evenly distributed among items 1, 2 and 4. In the post-test situation, 77 per cent chose the correct response, 14 per cent continued to indicate 2, and 5 per cent selected item 1. Of the females in this group, 56 per cent thought item 5 was the correct response, with their second choice being 31 per cent (for item 2). In the post-test situation, 75 per cent -- a substantial increase --chose item 5 as the correct response. In Group II 42 per cent of the males chose item 4 as the correct response in the pre-test. Item 5 was second with 25 per cent, and item 3 was chosen by 17 per cent. In the post-test situation, 42 per cent selected item 5 as the correct response, 33 per cent item 4, and 17 per cent item 3. For females in this group item 3 was the most popular -- with 39 per cent -- followed by 2 with 33 per cent and lesser amounts for the other three distractors. In the post-test situation only 22 per cent indicated the correct response, while 33 per cent indicated that they thought item 3 was the correct response. In Group III only 15 per cent indicated the correct response on the pre-test. The most popular pre-test item was 2, with a 35 per cent selection. In the post-test the numbers indicating the correct response did increase from 15 to 40 per cent, but there was also a substantial increase in the response to distractor 1, with an increase of 5 to 25 per cent. Thus, while learning was taking place the evidence of successful execution is not as formidable as in some of the other questions.

TODAY ONE CAR IS PRODUCED FOR EVERY HOW MANY PEOPLE LIVING IN THE UNITED STATES?

		1. 4	2. 6	3. 3	4. 10	5. 2
Group One	Male	Pre = 27 Post = 5	Pre = 27 Post = 14	Pre = 14 Post = 5	Pre = 23 Post = 0	Pre = 9 Post = 77
	Female	Pre = 6 Post = 0	Pre = 31 Post = 19	Pre = 6 Post = 0	Pre = 0 Post = 6	Pre = 56 Post = 75
Group Two	Male	Pre = 8 Post = 0	Pre = 8 Post = 0	Pre = 17 Post = 17	Pre = 42 Post = 33	Pre = 25 Post = 42
	Female	Pre = 6 Post = 0	Pre = 33 Post = 28	Pre = 39 Post = 33	Pre = 17 Post = 17	Pre = 6 Post = 22
Group Three	Male & Female	Pre - 5 Post - 25	Pre - 35 Post - 15	Pre - 10 Post - 5	Pre - 35 Post - 15	Pre - 15 Post - 40

TABLE 6
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 6. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 7 represents the percentage of subjects in all groups responding to each distractor in question 7 in pre and post-test. The question was "Which of the following is a major component of smog?" Response 1 (hydrocarbons) is the correct response. Pre-test response to this question indicates that many males and females in each of the three groups had prior knowledge of the answer to this question. In Group I 77 per cent of males indicated the correct response, and after the film was shown 100 per cent of the group indicated the correct response. Similarly, 69 per cent of the females thought that hydrocarbons - response 1 -- was correct, and upon the conclusion of the test 100 per cent indicated the correct response. Of the males in Group II 75 per cent of these pre-tested indicated hydrocarbons as the correct response, and 100 per cent after the film was seen. Eighty-nine per cent of females pre-tested thought hydrocarbons was the correct answer, and this figure rose to 100 per cent at the conclusion of the film. Of males and females in Group III -- 80 per cent of the pre-tested thought that hydrocarbons was the correct response, and in the post-test 100 per cent thought that hydrocarbons correct. The response to this question tends to indicate that while respondents in this survey had some prior knowledge as to the components of air pollution, the film was able to substantiate and confirm this prior information. This is indicated by uniform 100 per cent responses in the post-tests.

WHICH OF THE FOLLOWING IS A MAJOR COMPONENT OF SMOG?

		1. Hydrocarbons	2. Hydrofluoride	3. Ozone	4. Methane gas	5. Sodium oxide
Group One	Male	Pre = 77 Post = 100	Pre = 0 Post = 0	Pre = 9 Post = 0	Pre = 14 Post = 0	Pre = 0 Post = 0
	Female	Pre = 69 Post = 100	Pre = 0 Post = 0	Pre = 12 Post = 0	Pre = 19 Post = 0	Pre = 0 Post = 0
Group Two	Male	Pre = 75 Post = 100	Pre = 17 Post = 0	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 8 Post = 0
	Female	Pre = 89 Post = 100	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 6 Post = 0	Pre = 0 Post = 0
Group Three	Male & Female	Pre = 80 Post = 100	Pre = 10 Post = 0	Pre = 5 Post = 0	Pre = 5 Post = 0	Pre = 0 Post = 0

TABLE 7
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 7. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 8 indicates the percentage of subjects in all groups responding to each distractor in question 8 in the pre and post-test. The question was "Every year we produce more what than people?" The correct answer is 2 (cars). In the pre-test situation 55 per cent of the males in Group I thought it was radios -- distractor 5. In the post-test, however, where the respondents were answering this question after having seen the film, 100 per cent indicated that response 2 was indeed the correct response. Similar change was revealed by the females in this group. Initially, 62 per cent thought the correct response was radios, but in the post-test 100 per cent indicated the correct response. The males in Group II also chose distractor 5 as the most popular, with 42 per cent indicating that choice. After the film, however, 100 per cent of the males opted for the correct response. The females in this group made item 1 the more popular with 44 per cent indicating a pre-test preference for that distractor. In the post-test 89 per cent indicated that response 2 was correct. Sixty-two per cent of the males and females in Group III chose distractor 5 initially, but during the post-test 90 per cent indicated the correct response as item 2.

EVERY YEAR WE PRODUCE MORE WHAT THAN PEOPLE?

		1. TV Sets	2. Cars	3. Water craft	4. Refrigerators	5. Radios
Group One	Male	Pre = 23 Post = 0	Pre = 18 Post = 100	Pre = 5 Post = 0	Pre = 0 Post = 0	Pre = 55 Post = 0
	Female	Pre = 25 Post = 0	Pre = 12 Post = 100	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 62 Post = 0
Group Two	Male	Pre = 25 Post = 0	Pre = 33 Post = 100	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 42 Post = 0
	Female	Pre = 44 Post = 6	Pre = 39 Post = 89	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 17 Post = 6
Group Three	Male & Female	Pre = 20 Post = 10	Pre = 15 Post = 90	Pre = 0 Post = 0	Pre = 0 Post = 0	Pre = 65 Post = 0

TABLE 8
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 8. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 9 indicates the percentage of subjects in all groups responding to each distractor in question 9 in pre and post-test. The question was "Even air over which of the following is becoming polluted?" The correct response is item 5 (Polar Regions). In the pre-test, the males in Group I chose 2 as the most popular, with 50 per cent indicating the oceans. In the post-test, 77 per cent indicated the correct response. The females in this same group also chose 2 (the oceans), with 37 per cent selecting this distractor. In the post-test, 95 per cent indicated the correct response. Sixty-seven per cent of males in Group II thought Polar Regions was correct, with second choice (33 per cent) for the males being oceans. In the post-test, 100 per cent chose the correct response, distractor 5. Of the females in the same group, 50 per cent chose distractor 5, 39 per cent distractor 2, and 11 per cent 3. 89 per cent indicated the correct response on the post-test. Of males and females combined in Group III, 40 per cent picked the correct response (item 5), 25 per cent selected the oceans, 15 per cent said Northern Africa, 10 per cent South America, and 10 per cent New Zealand. In the post-test situation with this group, 80 per cent chose the correct response. There is a full 40% change to the correct response in this group.

EVEN AIR OVER WHICH OF THE FOLLOWING IS BECOMING POLLUTED?

		1. Northern Africa	2. The Oceans	3. South America	4. New Zealand	5. Polar Regions
Group One	Male	Pre = 5	Pre = 50	Pre = 5	Pre = 5	Pre = 36
		Post = 5	Post = 14	Post = 5	Post = 0	Post = 77
	Female	Pre = 0	Pre = 37	Pre = 19	Pre = 19	Pre = 25
		Post = 0	Post = 0	Post = 6	Post = 0	Post = 95
Group Two	Male	Pre = 0	Pre = 33	Pre = 0	Pre = 0	Pre = 67
		Post = 0	Post = 0	Post = 0	Post = 0	Post = 100
	Female	Pre = 0	Pre = 39	Pre = 11	Pre = 0	Pre = 50
		Post = 0	Post = 6	Post = 6	Post = 0	Post = 89
Group Three	Male & Female	Pre = 15	Pre = 25	Pre = 10	Pre = 10	Pre = 40
		Post = 5	Post = 10	Post = 5	Post = 0	Post = 80

TABLE 9
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 9. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Table 10 indicates the percentage of subjects in all groups responding to each distractor in question 10 in pre and post tests. The question was "Which of the following is most startlingly worn away by the air pollution in prevailing winds?" The correct response is item 3 (stone monuments). Males in Group I opted heavily for item 5 -- surface soil -- in the pre-test, as 41 per cent indicated this choice. Their second choice was house-paint, with a 36 per cent selection rate. In the post-test situation, 91 per cent said that stone monuments were "most startlingly worn away by air pollution." The females in this group were similarly divided, but their first choice in the pre-test was item 2 -- house paint -- with a 44 per cent selection. In the post-test situation, 94 per cent indicated stone monuments. In Group II the males found item 2 to be most popular, with 50 per cent indicating this choice and 33 per cent indicating item 3 as the correct response. In the post-test situation, 83 per cent chose the correct response of item 3, while 17 per cent continued with house-paint. The females pre-tested in this group chose item 2, house-paint, by 61 per cent; 17 per cent for stone monuments, with an additional 11 per cent for asphalt roadways and surface soil. In the post-test situation 56 per cent were indicating the correct response of stone monuments and 39 per cent for house paint. In the Group III pre-test, 30 per cent of both sexes thought surface soil was being "most startlingly worn away," while 25 per cent thought it was house-paint and 25 per cent chose stone monuments. In the post-test situation, 85 per cent had switched to the correct response of item 3 while 10 per cent continued to opt for house-paint and 5 per cent for asphalt roadways.

In fact, Eagle's Lament makes a point that both house paint and stone monuments are worn away by the air pollution in prevailing winds. It was determined that "most startlingly worn away" were the stone monuments, and that house-paint is subjected to the abrasive powers of wind more continually. Therefore, it was hoped that the correct response indicated by the post-test scores would be stone monuments. A few, however, did recall that house-paint was also mentioned, and thus indicated this as the correct response.

WHICH OF THE FOLLOWING IS MOST STARTLINGLY WORN AWAY BY THE AIR POLLUTION IN PREVAILING WINDS?

		1. Asphalt roadways	2. House Paint	3. Stone monuments	4. Road signs	5. Surface soil
Group One	Male	Pre = 5 Post = 5	Pre = 36 Post = 5	Pre = 18 Post = 91	Pre = 0 Post = 0	Pre = 41 Post = 0
	Female	Pre = 6 Post - 0	Pre = 44 Post - 6	Pre = 25 Post - 94	Pre = 0 Post - 0	Pre = 25 Post - 0
Group Two	Male	Pre = 8 Post = 0	Pre = 50 Post = 17	Pre = 33 Post = 83	Pre = 0 Post = 0	Pre = 8 Post = 0
	Female	Pre = 11 Post = 6	Pre = 61 Post = 39	Pre = 17 Post = 56	Pre = 0 Post = 0	Pre = 11 Post = 0
Group Three	Male & Female	Pre = 15 Post = 5	Pre = 25 Post = 10	Pre = 25 Post = 85	Pre = 5 Post = 0	Pre = 30 Post = 0

TABLE 10
PERCENTAGE OF GROUP RESPONDING TO
EACH DISTRACTOR IN QUESTION 10. ALL
THREE GROUPS INCLUDED, IN PRE & POST TEST.

Analysis of Variance

An analysis of variance was computed on the Syracuse University IBM 360 Computer. This evaluation encompassed a total sample in the pre and post situation. There were 93 subjects with pre and post scores and the analysis was run on those data. The analysis is in actuality a test involving repeated measures which was equal to a T-test of correlated means. An F ratio was established at 368.999, resulting in a probability of 0.0000. This probability level can be interpreted this way: That there is a significant difference between the pre-test scores and the post-test scores. Statistical inference allows us to state that the treatment did have a significant effect upon the post-test scores. These statistics are formulated in Table 14.

An analysis of variance was also conducted between the groups participating in the study to see if significant differences were occurring between these groups. Again, repeated measures were taken equal to a T-test of correlated means. The F ratio between groups was 0.142 resulting in a probability of 0.8679. This is not a significant difference at the .05 level of confidence. This is interpreted to mean that there is no appreciable difference between the groups. Computation of analysis of variance by trials was also accomplished, resulting in an F ratio of 774.182 and a probability of 0.0000. This is interpreted to indicate that there is a significant difference beyond the .05 level of confidence for each participant in each group. Further, it can be said that the film treatment has been proven statistically to have had a significant effect in the results of the post test.

Further analysis of variance in trials in each group result in an F ratio of 10.804, with a probability of 0.0002. This can be interpreted to be significant in that the separate trials in each group show appreciable change from the pre-test to the post-test.

At the conclusion of the post-test, the participants in each study group supplied certain information as part of an identification code. One attitude question was asked, and that was for the participants to rate the importance of the air pollution problem, comparing it to other problems which confront America.

The computer data input deck was run through an IBM key-sort with print-out facilities. The results of that read-out are summarized in Table 15. All three groups mode at the one rating, meaning "very important." This can be interpreted to mean that the participants in this survey, upon the conclusion of the post-test, after having seen the film Eagle's Lament rated the air pollution problem as one of the most important facing America.

In each instance, with each group, there is a quick trailing off of responses as the numbers increase -- 2, 3, 4. In only one case did one person rate the importance of air pollution as #7 in the continuum 1 to 10 (10 meaning "Not Important").

Finally, a correlation program was administered to the total sample data using a standard formula for Pearson-Product-Moment-R. The results of that correlation computation is noted in Exhibit 39. The Pearson-Product-Moment-R is -0.1724 which is surprisingly low, the researchers would expect it to be positive.

This can be interpreted to mean that there is no significant correlation between subjects for each subject's pre and post-test. This in effect means that while all subjects improved in their scores on the post-test, that each score did not increase by a similar amount. We cannot, therefore, conclude that the film treatment caused each post-test score to be increased by a certain amount.

	MALES		FEMALES	
Group One	Pre $\bar{x}$ = 2.5000 Test σ = 1.3056	Post $\bar{x}$ = 9.2273 Test σ = 0.8492	Pre $\bar{x}$ = 2.0000 Test σ = 1.6202	Post $\bar{x}$ = 9.3125 Test σ = 1.0440
	NET GAIN = 6.7272		NET GAIN = 7.3125	
Group Two	Pre $\bar{x}$ = 3.5833 Test σ = 1.8911	Post $\bar{x}$ = 8.9167 Test σ = 0.7592	Pre $\bar{x}$ = 3.3889 Test σ = 1.5684	Post $\bar{x}$ = 7.8333 Test σ = 1.5723
	NET GAIN = 5.3334		NET GAIN = 4.4444	
	MALES AND FEMALES TOGETHER			
Group Three	Pre $\bar{x}$ = 3.1000 Test σ = 1.3748		Post $\bar{x}$ = 8.6500 Test σ = 1.3143	
	NET GAIN = 5.5500			

$\bar{x}$ = Mean (Average)

σ = Sigma (Standard Deviation)

TABLE 11
COMPARISON OF PRE & POST MEAN AND STANDARD DEVIATION FROM THE MEAN, FOR THREE GROUPS MALE AND FEMALE.

	PRE-TEST	POST-TEST
	10 Items	10 Items
All Three Groups	$\bar{x} = 2.8495$	$\bar{x} = 8.8065$
Male & Female	$\sigma = 1.5926$	$\sigma = 1.2806$

NET GAIN = 5.9570

TABLE 12
COMPARISON OF COMBINED GROUPS (MALE PLUS FEMALE) IN PRE & POST TEST. MEAN AND STANDARD DEVIATION GIVEN.

Data Format = (15X,F3.0)

Group 1 40 subjects.

Group 2 30 subjects.

Group 3 20 subjects.

Variable 1 analysis.

Source	Mean Square	D.F.	F-Ratio	P
Total	11.0520	179.		
Between	1.7788	89.		
Groups	0.2578	2.	0.142	0.8679
Error (G)	1.8138	87.		
Within	20.2222	90.		
Trials	1596.0898	1.	774.182	0.0000
G by T	22.2734	2.	10.804	0.0002
Error (T)	2.0616	87.		

TABLE 13
TABLE OF ANALYSIS OF VARIANCE BETWEEN
TREATMENT GROUPS AND BY TRIALS
(PRE AND POST TEST)

Data Format = (15X,F3.0)

Group 1 93 subjects. Students with pre and post scores.

Variable 1 analysis.

Source	Mean Square	D.F.	F-Ratio	P
Total	11.0189	185.		
Between	1.7554	92.		
Trials	1650.0859	1.	668.999	0.0000
Error (T)	2.4665	92.		

TABLE 14
TABLE OF ANALYSIS OF VARIANCE
PRE/POST TOTAL SAMPLE

	Very Important	-	-	-	-	-	-	-	-	Not Important
	1	2	3	4	5	6	7	8	9	10
GROUP ONE	18	8	6	5	0	0	1	0	0	0
GROUP TWO	24	2	3	1	0	0	0	0	0	0
GROUP THREE	13	2	5	0	0	0	0	0	0	0

TABLE 15
NUMBER OF PERSONS IN EACH GROUP
RATING THE IMPORTANCE OF THE
PROBLEM OF AIR POLLUTION

VI

CONCLUSIONS

There are essentially two areas in which to summarize our conclusions. The qualitative reactions taken at the conclusion of the post-test; and the quantitative reactions computed from the scores of the pre and post-tests.

Qualitative Summary

The students in mass communication -- more specifically, radio and television at Syracuse University -- seem to be more aware of the technical and performance qualities of the film Eagle's Lament. While they acknowledged the problem, and in many cases indicated an awareness of the enormity of the problem, they tended to pick up the narrator's lack of eye contact, a contrived situation with the airline pilots in discussion, or in an opening which ran too long. They did conclude that the film was well put together and was of continuing interest. They acknowledged Mr. Godfrey as an appropriate choice as narrator, with his many years of flying experience well known to the general public. This group also concluded that the film did not have an appropriate ending with specific avenues of action explained to the viewer.

It seemed a general group estimate that too-heavy emphasis was placed on automobile air pollution in the film, resulting in a "playing down" of industry's role in spreading air pollutants.

Teachers at the Liverpool High School, however, did not seem so swayed as student groups regarding the seriousness and enormity of the air pollution problem. Many indicated their high regard for the narrator of the film and there was a general feeling of having "liked" the film. Reaction to the question "Is the film effective in stimulating an audience to action?" is inconclusive.

In the public opinion question of the significance of the air pollution problem, all three groups were heavily clustered around the "Very Important" rating on the score sheets. It can therefore be concluded that these people, once having been exposed to the film, Eagle's Lament did consider the question of air pollution as an important one.

Quantitative Summary

A quick look at the means and standard deviations of the test scores in each group, male and female, indicates that everyone experienced a significant increase in score on the post-test. Statistical tests performed on these data indicate this to be true. The effect, therefore, must be attributed to the ability of the film to convey information to an audience.

VII

SUPPORTING EXHIBITS

1 - 39

TIME 1

Part 1

Parameters

Col 1 - 5 = 10
Col 6 - 10 = 93
Col 11 - 15 = 11010
Col 16 - 20 = 0
Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms	1 10.0000
Mean	1 2.8495
SGMA	1 1.5926
Alph	1 0.3497

EXHIBIT 1

TIME 1

Part 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.18	0.386	0.4639	0.0
2	0	0.22	0.411	0.4767	0.0
3	0	0.20	0.403	0.4330	0.0
4	0	0.29	0.454	0.4026	0.0
5	0	0.20	0.403	0.2321	0.0
6	0	0.12	0.323	0.5155	0.0
7	0	0.75	0.431	0.2744	0.0
8	0	0.22	0.411	0.3124	0.0
9	0	0.42	0.493	0.3403	0.0
10	0	0.25	0.431	0.4297	0.0

EXHIBIT 2

TIME 1

Part 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	44	25	11	18	2
2	0	4	1	14	20	27	22	16
3	0	2	1	20	20	27	23	9
4	0	3	2	24	31	29	12	2
5	0	1	0	20	27	9	2	42
6	0	5	0	16	22	18	32	12
7	0	1	1	75	4	5	13	1
8	0	2	1	27	22	1	0	49
9	0	5	1	4	37	10	6	42
10	0	3	0	9	41	25	1	25

EXHIBIT 3

TIME 2

Part 1

```
Parameters

          Col     1 - 5              =              10

          Col     6 - 10             =              93

          Col    11 - 15             =           11010

          Col    16 - 20             =               0

          Col    21 - 25             =               0

Data Format  =  (A4,6X,5A1)

IHC209I  IBCOM - PROGRAM INTERRUPT - Divide Check Old PSW is FF25000F420106CE.
         Register Contained 0000000000000000

Traceback Follows  -  Routine   ISN    REG. 14     REG. 15     REG.  0     REG.  1

                      Main             000067E8    5000C820    00000088    000717F8

Entry Point  =  5000C820

Standard Fixup Taken, Execution Continuing


Items            1
                 10.0000


Mean             1
                 8.8065


Sgma             1
                 1.2806


Alph             1
                 0.5050
```

EXHIBIT 4

TIME 2

Part 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.98	0.145	0.4407	0.0
2	0	0.91	0.280	0.3429	0.0
3	0	0.88	0.323	0.4647	0.0
4	0	0.92	0.264	0.2751	0.0
5	0	0.92	0.264	0.4661	0.0
6	0	0.54	0.499	0.6682	0.0
7	0	1.00	0.0	0.0	0.0
8	0	0.96	0.203	0.5888	0.0
9	0	0.87	0.335	0.3927	0.0
10	0	0.82	0.386	0.4934	0.0

EXHIBIT 5

TIME 2

Part 3
CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	1	0	0	98	1
2	0	4	0	1	4	1	91	2
3	0	2	0	5	88	3	2	1
4	0	3	0	1	5	92	0	1
5	0	1	1	92	2	0	1	3
6	0	5	1	6	16	11	12	54
7	0	1	0	100	0	0	0	0
8	0	2	0	3	96	0	0	1
9	0	5	0	2	6	4	0	87
10	0	3	0	3	15	82	0	0

EXHIBIT 6

PRE/POST TOTAL SAMPLE

Parameters

Col 1 - 5 = 1

Col 6 - 10 = 1

Col 11 - 15 = 2

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (15X,F3.0)

Group 1 93 Subjects. Students with pre and post scores

Variable 1 Analysis.

Source	Mean Square	D.F.	F-Ratio	P
Total	11.0189	185.		
Between	1.7554	92.		
Trials	1650.0859	1.	668.999	0.0000
Error (T)	2.4665	92.		
T MN	1 2.8495	2 8.8065		

EXHIBIT 7

GROUPS X TRIALS ANALYSIS OF VARIANCE

Parameters

Col 1 - 5 = 1

Col 6 - 10 = 3

Col 11 - 15 = 2

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (15X,F3.0)

Group 1 40 Subjects. Group 1

Group 2 30 Subjects. Group 2

Group 3 20 Subjects. Group 3

Variable 1 Analysis.

Source	Mean Square	D.F.	F-Ratio	P
Total	11.0520	179.		
Between	1.7788	89.		
Groups	0.2578	2.	0.142	0.8679
Error (G)	1.8138	87.		
Within	20.2222	90.		
Trials	1596.0898	1.	774.182	0.0000
G By T	22.2734	2.	10.804	0.0002
Error (T)	2.0616	87.		

EXHIBIT 8

GROUPS X TRIALS ANALYSIS OF VARIANCE (Continued)

```
G MN     1                 2                 3
         5.7625            5.8667            5.8750

T MN     Pre               Post
         1                 2
         2.8444            8.8000

GBYT     Pre               Post
         1                 2

   1     2.2500            9.2750

   2     3.4667            8.2667

   3     3.1000            8.6500
```

EXHIBIT 8

PART 1

Pre-Test Group One Males

Parameters

```
        Col   1 - 5       =        10

        Col   6 - 10      =        22

        Col  11 - 15      =     11010

        Col  16 - 20      =         0

        Col  21 - 25      =         0

Data Format  =  (A4,6X,5A1)

Itms            1
                10.0000

Mean            1
                2.5000

SGMA            1
                1.3056

Alph            1
                0.1428
```

EXHIBIT 9

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.09	0.287	0.4844	0.0
2	0	0.14	0.343	0.0507	0.0
3	0	0.14	0.343	0.4565	0.0
4	0	0.36	0.481	0.1447	0.0
5	0	0.18	0.386	0.2708	0.0
6	0	0.09	0.287	0.2422	0.0
7	0	0.77	0.419	0.4569	0.0
8	0	0.18	0.386	0.0903	0.0
9	0	0.36	0.481	0.5790	0.0
10	0	0.18	0.386	0.6319	0.0

EXHIBIT 10

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	55	32	5	9	0
2	0	4	5	5	27	32	14	18
3	0	2	5	27	14	27	18	9
4	0	3	0	36	27	36	0	0
5	0	1	0	18	23	9	0	50
6	0	5	0	27	27	14	23	9
7	0	1	0	77	0	9	14	0
8	0	2	0	23	18	5	0	55
9	0	5	0	5	50	5	5	36
10	0	3	0	5	36	18	0	41

EXHIBIT 11

PART 1

Pre-Test Group One Females

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 16

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
2.0000

Sgma 1
1.6202

Alph 1
0.5754

EXHIBIT 12

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.25	0.433	0.4454	0.0
2	0	0.06	0.242	0.6375	0.0
3	0	0.0	0.0	0.0	0.0
4	0	0.19	0.390	0.6918	0.0
5	0	0.06	0.242	0.0	0.0
6	0	0.13	0.331	0.6999	0.0
7	0	0.69	0.464	0.5826	0.0
8	0	0.13	0.331	0.0	0.0
9	0	0.25	0.433	0.6236	0.0
10	0	0.25	0.433	0.5345	0.0

EXHIBIT 13

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	37	6	25	25	6
2	0	4	0	37	12	31	6	12
3	0	2	0	6	0	44	37	12
4	0	3	0	50	25	19	6	0
5	0	1	0	6	31	6	0	56
6	0	5	0	25	0	19	44	12
7	0	1	0	69	0	12	19	0
8	0	2	0	25	12	0	0	62
9	0	5	0	0	37	19	19	25
10	0	3	0	6	44	25	0	25

EXHIBIT 14

PART 1

Pre-Test Group Two Males

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 12

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
3.5833

Sgma 1
1.8911

Alph 1
0.5264

EXHIBIT 15

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.25	0.433	0.3307	0.0
2	0	0.33	0.471	0.5297	0.0
3	0	0.42	0.493	0.3650	0.0
4	0	0.25	0.433	0.5343	0.0
5	0	0.0	0.0	0.0	0.0
6	0	0.25	0.433	0.8396	0.0
7	0	0.75	0.433	0.3816	0.0
8	0	0.33	0.471	0.7167	0.0
9	0	0.67	0.471	0.1246	0.0
10	0	0.33	0.471	0.3427	0.0

EXHIBIT 16

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	33	25	17	25	0
2	0	4	0	25	0	25	33	17
3	0	2	0	33	42	8	8	8
4	0	3	8	8	25	25	33	0
5	0	1	0	0	25	17	8	50
6	0	5	0	8	8	17	42	25
7	0	1	0	75	17	0	0	8
8	0	2	0	25	33	0	0	42
9	0	5	0	0	33	0	0	67
10	0	3	0	8	50	33	0	8

EXHIBIT 17

PART 1

Pre-Test Group Two Females

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 18

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
3.3889

Sgma 1
1.5684

Alph 1
0.3290

EXHIBIT 18

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.17	0.373	0.6495	0.0
2	0	0.28	0.448	0.4789	0.0
3	0	0.17	0.373	0.6495	0.0
4	0	0.39	0.487	0.5288	0.0
5	0	0.39	0.487	0.1655	0.0
6	0	0.06	0.229	0.2491	0.0
7	0	0.89	0.314	-0.0250	0.0
8	0	0.39	0.487	0.3835	0.0
9	0	0.50	0.500	0.2480	0.0
10	0	0.17	0.373	0.4594	0.0

EXHIBIT 19

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	56	22	6	17	0
2	0	4	0	6	17	28	28	22
3	0	2	0	22	17	22	22	17
4	0	3	0	6	28	39	17	11
5	0	1	0	39	17	11	0	33
6	0	5	0	6	33	39	17	6
7	0	1	6	89	0	0	6	0
8	0	2	0	44	39	0	0	17
9	0	5	0	0	39	11	0	50
10	0	3	0	11	61	17	0	11

EXHIBIT 20

PART 1

Pre-Test Group Three Males and Females

(Only 3 Females)

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 20

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
3.1000

Sgma 1
1.3748

Alph 1
0.0617

EXHIBIT 21

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.15	0.357	0.6824	0.0
2	0	0.35	0.477	0.5566	0.0
3	0	0.40	0.490	0.3118	0.0
4	0	0.20	0.400	0.4183	0.0
5	0	0.25	0.433	0.4620	0.0
6	0	0.15	0.357	0.5806	0.0
7	0	0.80	0.400	-0.2364	0.0
8	0	0.15	0.357	0.01713	0.0
9	0	0.40	0.490	-0.0594	0.0
10	0	0.25	0.433	0.5459	0.0

EXHIBIT 22

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	40	30	10	15	5
2	0	4	0	5	25	20	35	15
3	0	2	0	5	40	35	20	0
4	0	3	0	20	50	20	10	0
5	0	1	0	25	35	5	5	30
6	0	5	0	5	35	10	35	15
7	0	1	0	80	10	5	5	0
8	0	2	0	20	15	0	0	65
9	0	5	0	15	25	10	10	40
10	0	3	0	15	25	25	5	30

EXHIBIT 23

PART 1

Post-Test Group Three Males and Females

(Only 3 Females)

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 20

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
8.6500

Sgma 1
1.3143

Alph 1
0.5435

EXHIBIT 24

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	1.00	0.0	0.0	0.0
2	0	1.00	0.0	0.0	0.0
3	0	0.85	0.357	0.4208	0.0
4	0	0.90	0.300	0.5453	0.0
5	0	0.95	0.218	0.4626	0.0
6	0	0.40	0.490	0.6833	0.0
7	0	1.00	0.0	0.0	0.0
8	0	0.90	0.300	0.5453	0.0
9	0	0.80	0.400	0.6277	0.0
10	0	0.85	0.357	0.4208	0.0

EXHIBIT 25

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	0	0	0	100	0
2	0	4	0	0	0	0	100	0
3	0	2	0	15	85	0	0	0
4	0	3	0	0	10	90	0	0
5	0	1	0	95	0	0	5	0
6	0	5	0	25	15	5	15	40
7	0	1	0	100	0	0	0	0
8	0	2	0	10	90	0	0	0
9	0	5	0	5	10	5	0	80
10	0	3	0	5	10	85	0	0

EXHIBIT 26

PART 1

Post-Test Group One Males

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 22

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
9.2273

Sgma 1
0.8492

Alph 1
0.1274

EXHIBIT 27

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	1.00	0.0	0.0	0.0
2	0	1.00	0.0	0.0	0.0
3	0	0.86	0.343	0.4183	0.0
4	0	0.95	0.208	0.0584	0.0
5	0	0.95	0.208	0.5724	0.0
6	0	0.77	0.419	0.5283	0.0
7	0	1.00	0.0	0.0	0.0
8	0	1.00	0.0	0.0	0.0
9	0	0.77	0.419	0.5283	0.0
10	0	0.91	0.287	0.4570	0.0

EXHIBIT 28

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	0	0	0	100	0
2	0	4	0	0	0	0	100	0
3	0	2	0	5	86	9	0	0
4	0	3	0	5	0	95	0	0
5	0	1	0	95	5	0	0	0
6	0	5	0	5	14	5	0	77
7	0	1	0	100	0	0	0	0
8	0	2	0	0	100	0	0	0
9	0	5	0	5	14	5	0	77
10	0	3	0	5	5	91	0	0

EXHIBIT 29

PART 1

Post-Test Group One Females

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 16

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4, 6X,5A1)

Itms 1
10.0000

Mean 1
9.3125

Sgma 1
1.0440

Alph 1
0.5098

EXHIBIT 30

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.94	0.242	0.8193	0.0
2	0	0.88	0.331	0.6562	0.0
3	0	1.00	0.0	0.0	0.0
4	0	0.94	0.242	0.0773	0.0
5	0	0.94	0.242	0.0773	0.0
6	0	0.75	0.433	0.7259	0.0
7	0	1.00	0.0	0.0	0.0
8	0	1.00	0.0	0.0	0.0
9	0	0.94	0.242	0.3246	0.0
10	0	0.94	0.242	0.8193	0.0

EXHIBIT 31

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	0	0	0	94	6
2	0	4	0	0	0	0	87	12
3	0	2	0	0	100	0	0	0
4	0	3	0	0	6	94	0	0
5	0	1	0	94	0	0	0	6
6	0	5	0	0	19	0	6	75
7	0	1	0	100	0	0	0	0
8	0	2	0	0	100	0	0	0
9	0	5	0	0	0	6	0	94
10	0	3	0	0	6	94	0	0

EXHIBIT 32

PART 1

Post-Test Group Two Males

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 12

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format = (A4,6X,5A1)

Itms 1
10.0000

Mean 1
8.9167

Sgma 1
0.7592

Alph 1
-0.2142

EXHIBIT 33

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	1.00	0.0	0.0	0.0
2	0	0.92	0.276	0.3640	0.0
3	0	0.92	0.276	0.3640	0.0
4	0	0.92	0.276	0.3640	0.0
5	0	0.92	0.276	0.3640	0.0
6	0	0.42	0.493	0.5380	0.0
7	0	1.00	0.0	0.0	0.0
8	0	1.00	0.0	0.0	0.0
9	0	1.00	0.0	0.0	0.0
10	0	0.83	0.373	0.2454	0.0

EXHIBIT 34

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	0	0	0	100	0
2	0	4	0	0	8	0	92	0
3	0	2	0	8	92	0	0	0
4	0	3	0	0	8	92	0	0
5	0	1	0	92	8	0	0	0
6	0	5	8	0	0	17	33	42
7	0	1	0	100	0	0	0	0
8	0	2	0	0	100	0	0	0
9	0	5	0	0	0	0	0	100
10	0	3	0	0	17	83	0	0

EXHIBIT 35

PART 1

Post-Test Group Two Females

Parameters

Col 1 - 5 = 10

Col 6 - 10 = 18

Col 11 - 15 = 11010

Col 16 - 20 = 0

Col 21 - 25 = 0

Data Format (A4,6X,5A1)

Itms 1
10.0000

Mean 1
7.8333

Sgma 1
1.5723

Alph 1
0.5632

EXHIBIT 36

PART 2

ITEM	SCALE	MEAN	SIGMA	R(TOTAL)	R(SCALE)
1	0	0.94	0.229	0.5913	0.0
2	0	0.78	0.416	0.1983	0.0
3	0	0.83	0.373	0.8059	0.0
4	0	0.89	0.314	0.1874	0.0
5	0	0.83	0.373	0.6163	0.0
6	0	0.22	0.416	0.5666	0.0
7	0	1.00	0.0	0.0	0.0
8	0	0.89	0.314	0.8620	0.0
9	0	0.89	0.314	0.4122	0.0
10	0	0.56	0.497	0.2607	0.0

EXHIBIT 37

PART 3

CHOICE DISTRIBUTIONS (PERCENTAGES)

ITEM	REV	KEY	ZERO	1	2	3	4	5
1	0	4	0	6	0	0	94	0
2	0	4	0	6	11	6	78	0
3	0	2	0	0	83	0	11	6
4	0	3	0	0	6	89	0	6
5	0	1	6	83	0	0	0	11
6	0	5	0	0	28	33	17	22
7	0	1	0	100	0	0	0	0
8	0	2	0	6	89	0	0	6
9	0	5	0	0	6	6	0	89
10	0	3	0	6	39	56	0	0

EXHIBIT 38

CORRELATION TOTAL SAMPLE

Parameters

Col 1 - 5 = 2
Col 6 - 10 = 93
Col 11 - 15 = 11100
Col 16 - 20 = 0
Col 21 - 25 = 0

Data Format = (A4,11X,F3.0/15X,F3.0)

Intercorrelation Analysis.

Mean	Pre 1	Post 2
	2.8495	8.8065

Sgma	Pre 1	Post 2
	1.5926	1.2806

Rmat	Pre 1	Post 2
Pre 1	1.0000	-0.1724
Post 2	-0.1724	1.0000

EXHIBIT 39

PART II

SECTION
5.

EAGLE'S LAMENT AS A DOCUMENTARY FILM -- A COMPARATIVE ANALYSIS BY COMMUNICATIONS STUDENTS

OVERVIEW OF RESULTS

I INTRODUCTION AND TEST DESIGN

II TREATMENT GROUP

III STUDENT COMPARISON OF THREE FILMS ON AIR POLLUTION

IV CONCLUSIONS

PART II

SECTION "B"

OVERVIEW OF RESULTS

I IN COMPARISON WITH ANOTHER AIRLIE PRODUCTION ... BEWARE THE WIND ... AND A CBS-TV NETWORK DOCUMENTARY ... THE POISONED AIR ... ADVANCED STUDENTS OF COMMUNICATIONS FELT THAT EAGLE'S LAMENT WAS WELL SUITED FOR THE TELEVISION "MASS-MAJORITY" AUDIENCE. THE FILM WAS SLIGHTLY LESS-SUITED TO THIS AUDIENCE THAN BEWARE THE WIND AND CONSIDERABLY MORE SUITED TO THE "AVERAGE" TV VIEWER THAN THE POISONED AIR.

II IN TERMS OF MOTIVATION TO ACTION, EAGLE'S LAMENT RAN A POOR THIRD CHOICE. 29 OF 40 STUDENTS CONSIDERED THE POISONED AIR AS THE BEST FILM IN THIS CATEGORY, 8 VOTED FOR BEWARE THE WIND, AND ONLY 2 OPTED FOR EAGLE'S LAMENT.

III IN THE MATTER OF WHICH FILM WAS MOST EFFECTIVE AS A FILM (MOST PROFESSIONAL, CREATIVE EFFORT) EAGLE'S LAMENT AGAIN RAN A POOR THIRD, WITH ONLY TWO OF 40 STUDENTS RANKING IT FIRST. IT IS NOTEWORTHY, HOWEVER, THAT BEWARE THE WIND RAN EXTREMELY WELL (16 OF THE REMAINING 38 OPINIONS) AGAINST THE HIGH-BUDGETED, PRESTIGE-LADEN CBS REPORTS TREATMENT.

I

INTRODUCTION AND TEST DESIGN

In April, 1969, forty students in "Criticism in the Public Arts" viewed three documentaries on air pollution: EAGLE'S LAMENT (Airlie Productions), THE POISONED AIR (CBS Reports) and BEWARE THE WIND (Airlie Productions). The films were viewed in the order listed, all during a single two-hour class-meeting.

The students were then asked to respond to the following questions in the form of a critical paper. The paper was assigned for the next class meeting to be held one week later.

1. What are the characteristics of the audience to which each film is addressed?
2. Which film contains the greatest motivation to action? Briefly state why.
3. Which film is the most professional -- i.e., makes the most effective use of film techniques to convey an idea? Why?
4. What is the purpose of each film? How do they differ?

When all papers had been submitted, an analysis of the opinions expressed was undertaken by the research team, and the results are reported in Section III, below.

II

THE TREATMENT GROUP

Of the forty students assigned to compare the three films, 27 were male and 13 were female. The breakdown of undergraduate majors was: 12 in broadcasting (10 male, 2 female); 8 in English (4 male, 4 female); 4 in History (all men); 3 in Education (all female); 2 in General Speech (one male, one female); 2 in Drama (one male, one female); 2 with NO ANSWER (one male, one female). The remaining students included males in Geography, Psychology, Business Administration, Physics, Economics and Philosophy, and females majoring in Political Science.

With reference to the level of study, these students were mostly members of the masters' sequence in TV-R at Syracuse University. The exceptions were 3 Ph.D. candidates in Mass Communications, still at the master's level in TV-R (one male, 2 female); 2 men who were proceeding towards a masters' degree in Journalism, and 3 who were undecided.

Since technical disciplines in all three films were evaluated as part of their assignment, it is important to note that most of the students tested were more than casually interested and involved in the field of documentary production. Of the forty students, sixteen indicated a direct desire to pursue a career in a production phase of television or film on a professional level There were 14 men and 2 women who responded in this way. In addition, when asked to indicate their professional experience, fifteen stated that they have been involved with film on a professional level and in some capacity which would make them more sensitive to production techniques than their fellow students. Only one female was included in this group.

Student Profiles

In order to study more closely the individual responses capsulized below, the following provides profiles of the respondents using a matching numerical progression.

The key is as follows:

sex

undergraduate major

current graduate status

career interest

professional experience

1. Male
Speech
(proceeding towards) MS in Television-Radio
TV and film production
No professional experience

2. Female
Education
MS in TVR (not yet complete, unless otherwise indicated)
ETV or commercial talent
No professional experience

3. Male
TV-Film; Political Science
MS in Journalism
News reporting; documentaries
News director; TV writer/reporter

4. Female
Journalism, music, education
Ph.D. candidate
NO ANSWER
Limited radio experience

5. Male
Geography
MS in TVR
Management/programming
No professional experience

6. Male
History
MS in TVR
TVR talent
Radio and TV announcing

7. Male
   English and History
   MS in TVR
   NO ANSWER
   No professional experience

8. Male
   History and Philosophy
   MS in Magazine and Communication Theory (proceeding towards)
   Priest/educator
   Experience in closed circuit television

9. Female
   NO ANSWER
   NO ANSWER
   NO ANSWER
   NO ANSWER

10. Female
    Education
    MS in TVR
    NO ANSWER
    Teaching and producing ETV lessons

11. Male
    TV-R
    MS in TVR
    NO ANSWER
    Experience in commercial and ETV

12. Female
    English Literature
    MS in TVR
    NO ANSWER
    Experience in copywriting, promotion

13. Male
    History
    MS in TVR
    TVR Management
    No professional experience

14. Male
    English Literature
    NO ANSWER
    Career -- TV News area
    No professional experience

15. Male
    TVR
    MS in TVR
    Producer -- TV/film
    4 yrs. professional work

16. Male
Psychology
MS - TVR
Producer/director of TV/films
Limited photography and film work

17. Female
English
MS in TVR
Eventually in ETV production
No professsional experience

18. Male
TV-R
MS in TVR
TV producer
4 yrs. experience in film/TV

19. Male
Accounting (Business Admin.)
MS in TVR
Commercial production
Experience at KTVI, St. Louis

20. Male
Physics
MS in TVR
Instructional Communications
Minimal professional experience

21. Female
Drama
MS in TVR
Public Affairs programming
No professional experience

22. Male
TVR
MS in TVR
TV News
Experience as freelance in TVR

23. Male
Economics
MS in TVR
TV Research
2 yrs. in TV production; radio

24. Male
TV-R
MS in TVR
Production/direction/management
7 yrs. prof. commercial TV

25. Male
TVR
Ph.D candidate
Professor in TV/film
10 yrs. professional experience in tv and film

26. Male
English
MS in TVR
TV writing and production
No professional experience

27. Male
Social Science
MS in TVR
Instructional TV
2 yrs. ITV and A-V

28. Female
Speech and Theatre
MS in TVR
Promotion
No professional experiesce

29. Male
Drama and Speech
MS -- undecided
Radio; commercial TV
CKLW-TV

30. Male
TVR
MS in TVR
Teach on college level
One summer as TV engineer

31. Female
English
MA received in Educational Psychology; Ph.D candidate
Teaching goal
No professional experience

32. Male
English
MS in TVR
TV News or production
WCTC Radio newsman - 3 years

33. Male
TVR
MS in TVR
Writing/producing TV or film
Documentary films; WTUV

34. Female
English
MS in TVR
NO ANSWER
No professional experience

35. Female
Political Science
MS in TVR
NO ANSWER
No professional experience

36. Male
NO ANSWER
MS in TVR
NO ANSWER
NO ANSWER

37. Male
BA in Philosophy
MA received in Theology
MS-TVR
Public Affairs film or TV documentaries
No professional experience

38. Male
TVR
MS in TVR
Production manager
Experience in TV and ETV

39. Female
TVR
(undergrad. senior)
Newswriting
Avco promotion intern

40. Female
TVR
MS in TVR
Teaching with children
WSYR experience

(NOTE: all MS-TVR or MS in TVR notifications refer to degree pursued)

III

STUDENT COMPARISON
OF
THREE FILMS ON AIR POLLUTION

Quantitative Summary of Opinion

1. WHAT ARE THE CHARACTERISTICS OF THE AUDIENCE TO WHICH EACH FILM IS ADDRESSED?

Most students more accurately answered the question "What type of audience was each film directed to?" rather than the assigned question.

Considering EAGLE'S LAMENT, seventeen believed the film to be geared to a general, "mass-majority audience." Three specified "low or middle class" audiences, six named the older, housewife audience as the target, while six specified presentation for service organizations as a goal for the film. Other interesting responses named "rural and small town other-directed men and women" and highly technically-oriented, professional people as the target audience.

Since THE POISONED AIR was produced for broadcast, ten specified the adult "mass TV audience" as the target for the program. Seventeen responses indicated a "better than average", intellectually-oriented audience, an obvious cut above the average TV viewer. Nine believed the program was directed to a general, mass audience, while recognizing the show does make intellectual demands.

Twenty-two named a general, mass public as the probable audience for BEWARE THE WIND. Four specified service organizations as the target for this third film. Eight considered a professional and highly educated audience to be the best for this film, while other interesting responses named "religious, city-oriented," and "industrial city audience" to be the target.

2. WHICH FILM CONTAINS THE GREATEST MOTIVATION TO ACTION? WHY?

Students named THE POISONED AIR as the film with greatest motivation. The breakdown went as follows:

29 for THE POISONED AIR

8 for BEWARE THE WIND

2 for EAGLE'S LAMENT

1 student did not respond directly
to the question

Of the twenty-nine who named THE POISONED AIR, fourteen agreed that a particularly motivating aspect was the personal, sincere and authoritative testimony presented throughout the film. Many students, of course, presented an assortment of reasons to fortify their choice. Eleven students were impressed by the specific plans of action that the film set forth.

3. WHICH FILM IS THE MOST PROFESSIONAL -- I.E., EMPLOYS MOST EFFECTIVE USE OF FILM TECHNIQUES TO CONVEY AN IDEA? WHY?

Again, most students believed THE POISONED AIR to use the most professional film techniques to convey an idea. The breakdown went as follows:

22 for THE POISONED AIR

16 for BEWARE THE WIND

2 for EAGLE'S LAMENT

Of the twenty-two students who named POISONED AIR, nine specified editing as an important factor; ten specified factors in the script, including research, pacing and arrangement of sequences; three complimented the camera work; three specified effective graphics and one commended the use of music.

Of the sixteen who mentioned BEWARE THE WIND, nine lauded the photography and use of camera; six complimented cutting or editing specifically; seven noted the effective script; three alluded to the pleasing use of music and three noted the use of color. Two specifically noted the full-circle device employed in the film, beginning and ending on the same topic or reference.

4. WHAT IS THE PURPOSE OF EACH FILM?

In reference to EAGLE'S LAMENT, nineteen believed its purpose to be merely informative, to lament the problem of air pollution, to present the facts and background and simply make the audience aware. Thirteen stated the film's purpose was to stir the audience and motivate the viewer to action directly. Two believed the purpose was to motivate the audience to support government action against pollution, while the remaining student did not answer the question directly.

The responses to the fourth question seemed to be limited to two general areas: whether the film was made to simply inform or to go beyond and motivate an audience to action.

Ten students stated the purpose of THE POISONED AIR was to merely inform the audience in detail about the problem. Twenty-seven students agreed that the film went further and "motivated," "chided," "angered," "incited" or "challenged" the audience to specific action towards specific solutions, while the remaining responses were indefinite.

Fourteen students stated that BEWARE THE WIND was made to make the audience aware, with dramatic effectiveness, that the air pollution problem exists. Twenty-three went further and stated the purpose was to pursuade or otherwise motivate the audience to follow through for solutions against the problem of air pollution. Two stated the purpose was to motivate the public to support government agencies in combatting air pollution -- the same two students who made the same observation for EAGLE'S LAMENT.

INDIVIDUAL RESPONSES - - - **EAGLES LAMENT**

(see listing of students in Section II above)

	Audience	Greatest Motivation?	Most Professional?	Purpose
1.	mass-middle and lower class	NO	NO	to condition the mass audience to support and help finance others' efforts against pollution
2.	lower and middle classes ("over 50")	NO	NO	"to acquaint the audience with the seriousness and dangers of pollution and its causes"
3.	"mass majority audience; lowest common denominator"	NO	NO	NO ANSWER
4.	schoolchildren; non-educated sectors	NO	NO	exposition of facts
5.	majority audience (average and below)	NO	NO	instill awareness of problem and effects
6.	general, mass audience	NO	NO	no basic attitude; does not concern itself with solutions
7.	captured audience; service organizations; community groups	NO	NO	NO ANSWER
8.	older, adult, female audience	NO	NO	pseudo-patriotic, emotional appeal
9.	"soap-opera-viewing housewife"	NO	NO	make small beginning toward creating awareness of a threatening problem
10.	broad, general middle-class mass	NO	NO	to lament the problem of air pollution

EAGLE'S LAMENT

Audience	Greatest Motivation?	Most Professional?	Purpose
11. mass-media oriented, city audience	NO	NO	informing viewiers about situation
12. housewives; "old folks at home"	NO	NO	lamenting the problem; not inciting action
13. highly-educated, sophisticates	NO	NO	stimulate thought, emotion and to motivate
14. female viewer	NO	YES--aesthetic quality; rhythm of argument; moderate pace; no boredom	tries to stir public indifference
15. emotional side of people--"old conservationists"	NC	NO	propaganda--"it is time to wake up and do something"
16. great mass; minimal education	NO	NO	inform and motivate large group
17. general public, H.S.educated	NO	NO	indirect plea; "more exhortative"
18. civic groups; service organizations	NO	NO	inspire action by community interest groups
19. common man; mass	NO	NO	hard sell plea to stop air pollution
20. lower - middle-class mass	NO	NC	to present problem only

EAGLE'S LAMENT

Audience	Greatest Motivation?	Most Professional?	Purpose
21. family appeal	NO	NO	to lament problem without constructive suggestions
22. mass majority	NO	NO	to arouse viewing audience and support fight against pollution
23. middle-class-housewives	NO	NO	appealing to mass in revealing problem only
24. not aimed at any segment	NO	NO	"purpose lost"
25. larger mass; "rural mind-set"	YES--attracts attention and emotions;involving and effective	NO	"arouse crankiness of mass"
26. laymen; service organizations	NO	NO	initiate thought on problems with general details
27. older "establishment types"	NO	NO	to inform public and move them to action
28. typical TV audience	YES--personal approach; more intimate due to homey approach of Godfrey	NO	make public aware of dangers and arouse people to take steps to end it
29. professional men; organizations concerned directly with problem	NO	NO	to make viewers aware of serious problem and encourage government agencies to act
30. general audience	NO	NO	tell people about problem arouse civic patriotism;arouse will of people to action

EAGLE'S LAMENT

	Audience	Greatest Motivation?	Most Professional?	Purpose
31.	mass audience	NO	NO	to inform and persuade audience to action
32.	Junior-H.S. intellect level	NO	NO	instructional in nature; make classroom audiences aware
33.	low-brow audience	NO	NO	merely to inform general public
34.	common folk in service organizations	NO ANSWER	NO	exposing problem to elicit response
35.	rural and small town other-directed men and women	NO	NO	motivate audience against air pollution
36.	"everyman" "mass consumers"	NO	NO	to entertain audience
37.	technically-oriented people (medicine and science)	NO	NO	semi-documentary approach to increase understanding and lead people to positive action
38.	service groups; "interested people"	NO	YES--no exact reasons	to start vigorous discussion on problem and motivate community to act
39.	"little old ladies in tennis shoes"	NO	NO	to educate audience, but offer little channel to action
40.	working-class viewer	NO	NO	to introduce problem and give reasons for it

INDIVIDUAL RESPONSES -- THE POISONED AIR

	Audience?	Greatest Motivation?	Most Professional?	Purpose?
1.	most select; upper 15% & 20%	YES-sophisticated audience is most socially aware	YES-subtle techniques linear historic perspective;more substance	to produce active pollution combattants in upper social strata
2.	non-elite,educated, "peripheral majority"	YES-hearings;authoritative personalities;professional narration	NO	to acquaint audience with seriousness and dangers of problem; and causes
3.	non-educated and educated elite	NO	NO	NO ANSWER
4.	adult,educated audience	YES-shows what has been done;doctors interviewed; actually calls for action	NO	to motivate audience to action
5.	viewer of greater education and intelligence	YES-in-depth coverage; array of statistics; list of what can be done	YES--(no technical reasons) black & white photos.does not detract	dwells on origins of problem; details what can be done
6.	wide segment	YES--basic theme of public involvement; effective coordination of scientific and general	NO	pessimistic, grave attitude; not concerned with solutions
7.	prime-time network TV mass audience	YES--authoritative and trustworthy presentation; practical; proven solutions	NO	reduces problem to human, soluble terms;detailed and exhaustive
8.	general,mass,prime-time audience	NO	YES-expert editing in juxtaposing facts wide range of professional opinion	to reveal complexity of problems;provide basis for opinion-forming

CBS: THE POISONED AIR

	Audience?	Greatest Motivation?	Most Professional?	Purpose?---
9.	evidence-oriented; serious audience	YES-emphasized effects on living things;dwelled on specific methods to control problem; challenged audience to action	NO	reveal complexity of problems; challenge audience to action
10.	non-elite,educated	YES-promoted action thru examples;source credibility;realistic scenes; newslike presentation	YES-best organized and structured;expert interviews presented logically;convincingly.	to show danger and to lament problem;also show efforts to overcome and challenge audience to act
11.	adult TV audience	YES-informative;influenced public to take action and fight	YES-TV and news techniques; good testimony; hard sell	inform and influence public to take action and fight
12.	business,professional and academic world	YES-overwhelming facts; related problem to all parts of country	NO	expose growing seriousness of problem; chided public to action
13.	largest possible audience;elite & average	YES-convincing facts; referred to common experiences; aroused personal needs and ways to meet them	YES-uninterrupted flow of movement;careful arrangement of sequences for emotional impact; intelligent camera placement	effort to solve pollution by directing to largest possible audience
14.	broad and generally educated	YES-authentic testimony; direct language	NO	reports on our own carelessness; suggests solutions
15.	rational audience	NO	NO	objective reporting of problems
16.	intellectual interests	NO	NO	present thorough information on problem
17.	generally college educated	YES-technical,historical and medical info;cause-effect clarity;city examples	YES-persuasive rhythm of slow dissolves; well-spaced testimony; authority of research	to directly incite audience to action on problem

CBS: THE POISONED AIR

Audience	Greatest Motivation?	Most Professional?	Purpose
13. mass, metropolitan audience	YES-due to exposure to vast potential audience	NO	inform general public; start masses rumbling
19. qualified audience individual within TV audience	NO	NO	to present problem with shocking, straight-forward news approach
20. widest possible mass at high intellect level	NO	YES-cerebral, not emotional; greater depth and level of authority	to provide most specific information and supply what the individual can do
21. intellectual-conscious person	YES-convincing testimony; graphic examples; intellectual clarity	NO	explores what has been done; what is stopping progress and what one must do
22. seeking audience that wants detailed info. on problem	YES-personal interviews of involved officials	YES-strong and specific script; helpful graphics; full-circle device	to inform, help make decision; support that decision to solve problem
23. influential, intellectual elite	YES-outlines combattants; case histories; specific plan of action	YES-careful construct- to build problem; dramatic interviews; clear graphics	"to get viewers off their posteriors to do something
24. NO ANSWER	YES-facts and figures to back up frightening visual sequences	NO	no pollution cannot be solved
25. NO ANSWER	NO	YES-authority testimony; careful intercutting with their references; good camera movement	informing and giving audience opportunity to propose solutions
26. educated elite; average TV viewer; layman	YES-newsy; showed what has been done; persuasive testimony and graphics	NO	arouse audience to action

CBS: THE POISONED AIR

	Audience?	Greatest Motivation?	Most Professional?	Purpose.
27.	NO ANSWER	YES-exposed dangers and projected possible action; effective testimony	YES-made best use of the visual impact of medium	to inform public and move them to action
28.	more academic group than average audience	NO	YES-organized, well-written;tight;clear graphics	urgently portrayed dangers and aroused audience to take steps to prevent problem
29.	general mass audience	YES-enlightened health hazard angle;good testimony	YES-good editing; sensitive script; good music.	critically explore in detail the truth about air pollution
30.	better-than-average audience	YES-b & w made it more dramatic;length over strength	YES-most artistic; well written,directed, organized;most scientifically presented	arouse civic patriotism, arouse will of people to action
31.	sizable part of mass, tho it makes intellectual demands	YES-forceful, with authority; explicit about audience's part in solutions	YES-effective dramatic structure;good timing in editing;smooth,lucid script;source credibility	to urgently involve and direct action
32.	elite,college graduate; opinion leaders and makers	YES-angers man to actionby playing on his apathy	YES-b&w did not distract from seriousness of problem	to uncover culprits; anger man to action
33.	intellectual	NO	NO	to inform and urge individual effort
34.	select audience	NO ANSWER	YES-pointed out ironies; presented facts;opposing opinions	showed what could be done to prevent air pollution
35.	inner-directed,socially conscious;educated other-directed people	YES-presents many feasible solutions;convincing testimony	NO	display and discuss solutions

CBS:: THE POISONED AIR

	Audience?	Greatest Motivation?	Most Professional?	Purpose
36.	"everyman," mass consumers	YES-personal interviews involve you;b & w does not allow romanticism	YES-achieves positive effects thru economy and spareness	to inform us and grip our emotions about the problem
37.	mass TV audience	YES-thorough presentation; pushed need for motivation	YES-finely written script;quick-moving; rapid-paced	documentary approach to leading people to positive action
38.	TV audience as individuals within their homes	NO	NO	to inform public merely; with hopes that they will retain information
39.	public affairs-minded TV audience	YES-careful conclusions drawn;informative,factual; problem posed scientifically	YES-well-organized; well-balanced;well-paced by using specifics to support general statements	to present direct conclusions drawn after careful scientific explanations
40.	middle-class	YES-crisp; succinct; intellectual framework; powerful interviews with ordinary citizens	YES-appropriate narrative; believable interviews	to inform and initiate action

INDIVIDUAL RESPONSES --- BEWARE THE WIND

	Audience	Greatest Motivation?	Most Professional?	Purpose?
1.	H.S. educated and service organizations	NO	NO	to condition mass audience to supporting and financing the efforts of someone else against pollution
2.	middle class and upper-lower	NO	YES--visually pleasing;filmy;full-circle device(open and close)	to acquaint audience with seriousness, dangers and causes of pollution
3.	peripheral mass and non-	YES-color has great effect than b&w CBS	YES-best visual imagination;good location work;good iditing; excellent narration	tell audience by implication and underscore that we must combat the garbage in the air.
4.	any kind of audience	NO	YES-good photog; well written; with examples of accomplishments	to motivate audience to action
5.	majority audience (average and below)	NO	NO	instill awareness of problem and its effects in the minds of audience.
6.	more refined segment of audience;higher education level	NO	YES-excellent cinematography; heavy scientific emphasis handled creatively	solutions can be initiated now that problem is realized.
7.	captured audience; service org.	NO	YES-tight,circular development;cogent, sincere,poetic narration; outstanding music, good camera and editing	dramatically present problem with dramatic effect upon audience
8.	general mass audience;over 15	YES-effective use of facts and examples; strong,optimistic conclusion	NO	motivate audience with invitation to act

BEWARE THE WIND

Audience	Greatest Motivation?	Most Professional?	Purpose
9. religious, city-oriented	NO	YES-imaginative & effective cutting; blending information with emotional tone	present concise summary of problem; highlights life and death aspect of problem, harping on man's responsibility
10. general, mass public	NO	NO	show us the danger as real and man-made
11. industrial city audience	NO	NO	factual presentation with motivation powers
12. scientific, college or service groups	NO	YES-juxtaposition of cuts; well-written script; brilliant color; subdued music	factual lamenting of problem, not inciting action
13. highly educ, sophisticated	NO	NO	stimulate thought, emotion and motivation
14. broad, generally educated segments	NO	NO	warn of dangers of pollution
15. reasoned, emotional audience	YES-graphically indicated personal affects of problem	YES-well-written, tight script; effective production	propaganda--"it is time to wake up and do something"
16. broadest; bridges gap between high and low intellects	YES-definite pace; plenty of information but not boring; believable problems; definite solutions	YES-excellent cinematography and editing; definite rhythm and pace of production	to inform and motivate target audience
17. general public; HS educated	NO	NO	indirect plea; more exhortative
18. civic groups	NO	YES-strong narrative; emphasis on public health aspects	to inspire action by community interest groups

BEWARE THE WIND

Audience	Greatest Motivation?	Most Professional?	Purpose
19. common man; mass	YES-soft-sell approach; explains that solutions are within viewers' domain	YES-orderly movement to draw viewer into problem; directed towards single conclusion	soft sell; urged that solution is within viewer's means
20. middle and upper-middle class	YES-emotional appeal	NO	convey message that action must be taken
21. NO ANSWER	NO	YES-brilliant photography; well-chosen music; mood preserved	create mood for action
22. peripheral mass	NO	NO	to arouse audience to support fight against pollution
23. "middle America"	NO	NO	exposes problem as evil but does not involve
24. general audience	NO	YES-good grasp of film medium	emotional involvement with problem
25. those oriented to corporate action	NO	NO	analyze problem and point to positive action
26. highly educated lay audience and scientists	NO	YES-lyric set to film; excellent color photography	to educate the elite audience to the problem
27. service orgs.	NO	NO	to inform public about pollution, and to move them to action
2 . typical TV audience	NO	NO	arty presentation to make public aware of dangers and arouse people to take steps to end it
29. professional men, directly concerned with problem	NO	NO	to make viewers aware of serious problem and encourage government agencies to act

BEWARE THE WIND

Audience	Greatest Motivation?	Most Professional?	Purpose
30. general audience	NO	NO	tell people about problem; arouse civic patriotism; arouse will of people to action
31. mass audience	NO	NO	to inform and persuade audience to act
32. H. S. grads	NO	NO	instructional in nature; to make classroom aud.aware of problem
33. mass audience	YES-problems brought to personal level; current	YES-excellent editing and cinematography; fast pace; down-to-earth content and approach	inform audience of problems and solutions
34. NO ANSWER	NO	NO	showed what could be done to prevent air pollution
35. lower-middle class; other-directed and middle-middle class,both inner and other directed	NO	YES-balance of color music and good narration;pleasant to watch and listen	inform audience of problem and pose suggested solutions
36. everyman	NO	NO	tells what others are doing; demands nothing of audience
37. technically-oriented people(scientists and medical men)	NO	NO	semi-doc approach to increasing understanding and leading people to positive action
38. service orgs.,interested citizens	YES-urged that technology can solve problem	NO	to start vigorous discussion and motivate local community members to action
39. scientific audience; medical profession	NO	NO	educate audience but offer little channel to action
40. middle-class audience	NO	NO	informed and persuaded public to act

CONTENTS

PART I

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-- AN OVERVIEW

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C - ANALYSIS OF POTENTIAL VIEWERSHIP FOR THE TEST FILM

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SUMMARY AND RECOMMENDATIONS

A.

STUDY CONCLUSIONS -- AN OVERVIEW

A

NEARLY TWO-THIRDS OF THE OPERATING ETV STATIONS INCLUDED IN THE PROJECT HAVE A HIGH LEVEL OF INTEREST IN AIRING PROGRAM MATERIAL DEALING WITH AIR POLLUTION. NEARLY TWO-THIRDS OF ALL STATIONS INCLUDED INDICATED A WILLINGNESS TO EXTEND PRIME TIME FOR THE TELEVISING OF FILMS SIMILAR IN DESIGN, PURPOSE AND QUALITY TO EAGLE'S LAMENT. THE CURRENT STUDY ONFIRMS SIMILAR FINDINGS IN EARLIER STUDIES OF THIS TYPE.

B

THE REPUTATION OF THE PRODUCING AGENCY IS CLEARLY AN INFLUENCE UPON THE DECISION TO TELECAST FILMS LIKE EAGLE'S LAMENT.

C

UNDER CONDITIONS OF FULL-SCALE NATIONAL APPLICATION, DISSEMINATION THROUGH THE ETV-PTV COMPLEX WOULD PRODUCE SIGNIFICANT VIEWERSHIP.

D

PRELIMINARY DATA REVEALS -- AS IN PAST STUDIES -- AN UNEXPLORED POTENTIAL FOR THE USE OF ETV TELECASTS AS A STIMULANT TO ADDITIONAL COMMUNITY "CAPTIVE-AUDIENCE" SCREENINGS.

B.

ETV STATION COOPERATION

On September 17, 1968, a list of 125 U.S. Educational Television Stations -- selected from over 150 stations then on the air -- was submitted to Dr. Murdock Head at the Airlie Foundation. Stations not submitted as potential evaluation sites included many of those which participated in an earlier evaluation of this type as well as those in communities where Dr. Head's staff already had definite commitment for commercial-station airing of either Beware The Wind or Eagle's Lament. After a series of discussions, a number of additional stations were deleted from the original list submitted. The eliminated stations served communities where, it was felt, the potential for a commercial airing of the film might be jeopardized if an ETV station carried the same program. Following these deliberations it was agreed that 25 stations would be invited to participate in the evaluation projects for either Beware The Wind or Eagle's Lament. Upon the conclusion of the Beware The Wind evaluation, it was decided that the final phase of the project would include only 17 stations. The elimination of 8 additional stations from the original group of 25 came as a result of potential scheduling conflicts with commercial stations who might air the film. Accordingly, the list was narrowed to the following seventeen stations.

LIST OF ETV STATIONS INVITED TO PARTICIPATE IN THE EVALUATION

WBIQ
Alabama Educational Television Commission
2151 Highland Ave.
Birmingham, Alabama 35205

KUAT-TV
Universities and State College of Arizona
University of Arizona
Herring Hall
Tucson, Arizona 85700

KXIE-TV
Northern California Educational TV Assn., Inc.
2410 Larkspur Lane, Box 9
Redding, California 96001

KVIE-TV
Central California Educational Television
Box 6
Sacramento, California 95801

WHYY-TV
Fifth and Scott Sts.
Wilmington, Delaware

WUFT-TV
University of Florida
226 Administration Bldg.
Gainesville, Florida 32603

WFSU-TV
State Board of Regents of Florida
Acting for Florida State University
Tallahassee, Florida 32306

WGTV
University of Georgia
Athens, Georgia 30601

KUID-TV
Regents of the University of Idaho
Moscow, Idaho

KTWU-TV
Washburn University
17th & College Sts.
Topeka, Kansas 66604

WMSB-TV
Board of Trustees
Michigan State University
East Lansing, Michigan 48823

KUON-TV
The University of Nebraska
Lincoln, Nebraska 68508

WNED-TV
Western N.Y. Educational TV Assn.,Inc.
Hotel Lafayette
Buffalo, New York 14203

WMHT-TV
Mohawk-Hudson Council on Educational TV Inc.
Riverside School
Front St.
Schenectady, N. Y. 12305

WCNY-TV
ETV Council of Central New York, Inc.
Old Liverpool Rd.
Liverpool, N. Y. 13088

WOUB-TV
Ohio University
Athens, Ohio 45701

WBGU-TV
Bowling Green State University
Bowling Green, Ohio 43402

BETWEEN JUNE 10 AND JULY 16, 1969 THE 17 STATIONS LISTED ABOVE WERE SENT THE FOLLOWING LETTER.

SAMPLE

Dear Sir:

I have been asked to evaluate still another communications project, sponsored by the Public Health Service of the Department of Health, Education and Welfare, which involves the production and dissemination of documentary films on public health problems. Such films were designed expressly for television distribution. The evaluation is part of a continuing project. The grantee is The Airlie Foundation's Dr. Murdock Head. I am familiar with Dr. Head's documentary work and share the enthusiasm for his films which is expressed by many critics. Some years ago one of his films, featuring former President Eisenhower, REPRIEVE, was given an Emmy award by the Washington Chapter of The National Academy of Television Arts and Sciences. His recent work, Beware The Wind, has also won an Emmy.

My responsibility as Project Evaluator is three-fold. My first task is to ask various educational television stations in key areas to agree to screen a film sometime within the next 90 days, and in the best program time possible. My second responsibility is to solicit from those stations who do carry the film any available documented evidence regarding its reception in the area. It would also be useful to have some brief statements of personal judgment on the film by key staff members of each station. We will provide a brief outline for this procedure at a later time. Finally, I am to coordinate these reports and submit them to The Airlie Foundation of George Washington University for inclusion in Dr. Head's final report to the funding organization.

The film which I have been asked to evaluate in this manner is called Eagle's Lament. It has already been carried on several commercial stations in the country in the first phase of evaluation. Eagle's Lament is a 22 minute, color documentary produced by Airlie Productions through the George Washington University Medical Center Department of Medical and Public Affairs to focus professional and public attention on air pollution, the danger at present and the need to develop solutions to counter the problem.

The film is hosted by Arthur Godfrey. Through his 39 years of experience as a pilot he presents the problem from this impressive point of view. The program includes commentary by commercial airline pilots who are responsible daily for the safety of a large segment of the American public, and by virtue of this responsibility feel the urgency of dealing with this growing menace. These men -- from their vantage point -- see most dramatically the cross country movements of pollutants in the air and ever decreasing visibility in our skies. Scenes of the causes and effects of air pollution are included from Pittsburgh to Pompeii, to Puerto Rico. They graphically illustrate the need for taking the scientists' solutions off the blackboard and putting them to work to bring back the air it was once a pleasure to breathe.

This 35 mm film has been reduced to 16 mm for distribution on television and to civic and professional groups throughout the United States. An "open-end" is provided for a discussion by several prominent doctors from your area medical society who are active and interested in the local rehabilitation situation in your community. Because of its past experience, the Airlie Center can supply -- if you would like -- suggestions for the development of this portion of the program.

It is my hope to complete this distribution to several educational television test cities before the end of the summer. There is no expense involved either from the station or the medical society for these programs. The only compensation to the Airlie Center is to have them shown in prime evening time, in color if possible, with as much local promotion as can be afforded.

Please let me know at your earliest convenience if you can cooperate in this important project. We can work out the details of your scheduling once you have had an opportunity to consider this proposal. I would be happy to supply you with a screening print in advance.

I should add that once you have scheduled the film, The Airlie Foundation will immediately get in touch with the medical society in your area and they will handle all the details of the closing discussion.

May I hear from you at your earliest convenience?

Sincerely yours,

A. William Bluem
Professor
S. I. Newhouse Communications Center

AWB/gv

INITIAL RESPONSE

11 out of 17 stations (64%) responded to the initial inquiry. All expressed interest in participation and requested a screening print.

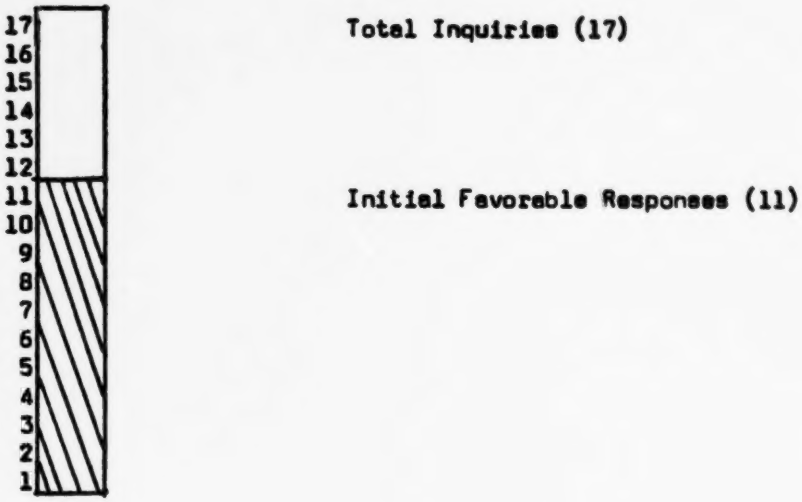

CHART I
(Initial Response)

AGREEMENT TO AIR EAGLE'S LAMENT

The next, perhaps most significant, finding concerns the airing-decision rate among ETV stations.

All stations which responded also agreed to air "Eagle's Lament" without seeing a preview print.

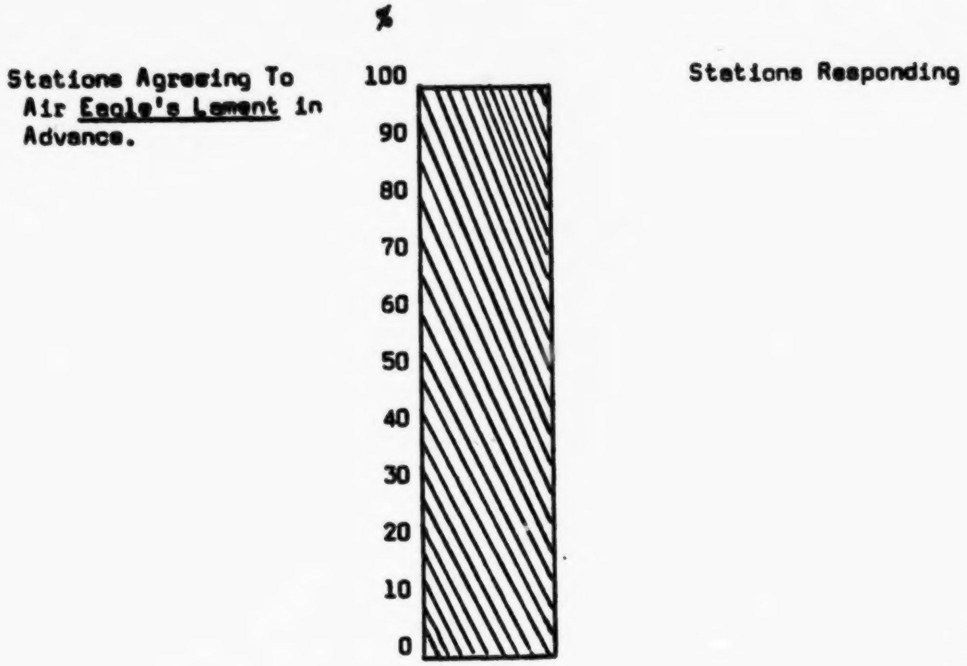

CHART II
Advance Airing-Decision Rate

In the opinion of the research team, two factors were responsible for this unusually favorable response. First, of course, it must be noted that the original invitation suggested that the film could be aired during the summer months, when available programming was in lower supply.

This factor alone, however, could not account for the unusual response -- wherein all eleven stations *agreed to air before even seeing the film*. What obviously influenced such a decision was the "track-record" -- the past history of Airlie Productions. Either the eleven stations were already familiar with Airlie films and had sufficient confidence in them to warrant extending carte blanche in scheduling, or decision-making personnel were impressed by actual reviews or word-of-mouth praise of Airlie work. *In either case, it is clear that ETV stations are beginning to know Airlie Production work and are showing clear respect for it.*

Further analysis reveals that the most significant factor in this unusual airing-decision rate is *past experience* with Airlie films. Eight of the stations who agreed to air in advance had cooperated in earlier evaluation projects of this kind.

Listed below (Chart III) are those stations who have agreed to cooperate in evaluation of *Eagle's Lament*. Each of these stations has either *already aired* the film or agreed to schedule the film in prime time upon completion of of final arrangements with the Airlie Center. This phase of evaluation was terminated in Syracuse on *September 30, 1969*, and arrangements for completion of airing procedures was re-assigned to the Airlie Center, which will complete this phrase pending final commercial-station airing commitments, and/or final local medical-society cooperation arrangements. Such a shift allows for greater flexibility in scheduling by all parties concerned.

CHART III
Stations Airing *Eagle's Lament*

	Station	City	Air-Date	To Complete
1)	WBIQ-TV	Birmingham, Ala.		Commercial Airing
2)	KVIE-TV	Sacramento, Cal.	7/27/69	--
3)	WUFT-TV	Gainesville, Fla.	8/3/69 10 p.m.	--
4)	WFSU-TV	Tallahassee, Fla.		Commercial Airing
5)	KTWU-TV	Topeka, Kansas		Medical Society - Commercial Airing
6)	WMSB-TV	E. Lansing, Mich.		Medical Society - Commercial Airing
7)	WNED-TV	Buffalo, N.Y.		Commercial Airing
8)	WMHT-TV	Schenectady, N.Y.		Commercial Airing
9)	WCNY-TV	Syracuse, N.Y.		Commercial Airing
10)	WOUB-TV	Athens, Ohio		Commercial Airing
11)	WBGU-TV	Bowling Green, O.	12/2/69	Commercial Airing

C.

ANALYSIS OF POTENTIAL VIEWERSHIP FOR THE TEST FILM

CHART IV

AN ESTIMATE OF MAXIMUM POTENTIAL VIEWING AUDIENCE FOR EAGLE'S LAMENT UPON COMPLETION OF AIRING SCHEDULE

STATION AND CITY	TOTAL TV* HOMES	UHF HOMES**	TOTAL HOMES WHICH COULD RECEIVE PROGRAM
WBIQ-TV (UHF) Birmingham, Ala.	Alabama State ETV Network (8 Stations)		300,000
WMHT-TV Schenectady, N.Y.	175,000		175,000
WUFT-TV (VHF) Gainesville, Fla.	200,000		200,000
KVIE-TV (VHF) Sacramento, Calif.	705,900		705,900
WFSU-TV (VHF) Tallahassee, Fla.	240,200		240,200
WOUB-TV (UHF) Athens, Ohio			40,000
KTWU-TV (VHF) Topeka, Kansas	173,900		173,900
WMSB-TV (VHF) Lansing, Michigan	848,600		848,600
WNED-TV (UHF) Buffalo, N. Y.	663,200	265,280	265,280
WCNY-TV (UHF) Liverpool, N. Y.	605,400	242,000	242,000
WBGU-TV (UHF) Bowling Green, Ohio			40,000

ESTIMATED MAXIMUM NUMBER OF VIEWING HOMES CAPABLE OF RECEIVING EAGLE'S LAMENT	3,230,880
ESTIMATED MAXIMUM POTENTIAL VIEWING AUDIENCE (2.5 VIEWERS PER HOME)	8,077,500

CHART V

DISCUSSION:

The total number of TV homes served by each station is calculated on the basis of homes within the coverage area of the least powerful commercial TV station in the market, as reported in the 1968 edition of *Television Factbook*. No true figures are available for the Alabama State Network or the two Ohio Regional stations. Estimates are rough.

Estimated homes for the UHF stations in the sample is calculated on the basis of a national UHF conversion or new set purchase rate of approximately 40%. (Rough estimate provided by Dr. Lawrence Myers, Jr., Director of TV Research, Syracuse University Newhouse Communications Center.)

ESTIMATED TOTAL -- ACTUAL VIEWERS

As suggested in earlier evaluations, the total number of homes capable of receiving a telecast by no means indicate the actual viewing audience. The average cumulative weekly audience for ETV stations is estimated at 20 to 25 per cent, but it is estimated that the average actual viewing audience for any single ETV program ranges between .6 and 1.0 per cent. Using a base of .8 per cent then, it may be estimated that approximately 64,620 viewers will actually have seen *Eagle's Lament* upon completion of airing in the various communities where it has been placed.

The success, in terms of pure numbers in audience exposure, for ETV dissemination is absolutely dependent -- as has been observed in all past studies -- upon ETV station selection. Unless all of ETV's "Big Eight" -- stations located in Boston, Chicago, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco and Washington -- are included, total ETV viewership will remain low.

We may summarize this effort in ETV dissemination, however, by concluding that some 65,000 people who might never have seen *Eagle's Lament* did actually witness the film, and a full-scale ETV dissemination effort (meaning a line-up of some 70-80 stations including at least four of the "Big Eight") would probably produce an audience for the film of well over 1,000,000. Under most circumstances, this must be regarded as a formidable number of viewers, particularly in view of the specialized nature of the TV audience.

D.

THE DISSEMINATION MODE:
SUMMARY AND RECOMMENDATIONS

There is no question that the dissemination plan for educational television which has been tested here is viable, useful, and capable of producing valuable social understanding and insight regarding the national menace of air pollution. The same dissemination plan tested for Beware The Wind and Eagle's Lament was also tested and found equally valuable in connection with two other films produced by the Airlie Foundation which dealt with different aspects of public health concern in America -- The Wasted Ones (rehabilitation) and The Savage Cell (leukemia). The results of all tests for all four films can be generalized in this way:

1) ETV Stations are willing and ready to carry such public health messages.
2) Any near-national application of testing procedures would produce a significantly large audience.

So much for what is obvious. Despite these positive results, however, the entire ETV dissemination plan can develop only as a secondary or alternative system to the powerful commercial TV dissemination system which has evolved. This fact is in itself disappointing, for it confirms once more that the ETV system itself has not made significant headway in competing with commercial TV. It has not done so simply because it has deliberately set out to avoid large audiences, and yet has not maximized the impact it might have with the audience it does attract. If the system does, as Schramm and others have concluded, attract a specific elite within the greater audience, it has not yet been able to bring this audience to bear upon important public health concerns.

There is, of course, little doubt that the earlier methodologies and designs for A-V dissemination of information about air pollution which have been developed by the Airlie Foundation must continue to dominate all future research efforts in this area. From the standpoints of exposure, impact and flexibility in reaching mass audiences, the TV dissemination plans which have evolved richly deserve continuing testing and evaluation. Perhaps the observation of Dr. Amos N. Johnson, President of the American Academy of General Practice, best summarizes the results of earlier dissemination tests:

> "That open-circuit, prime-time, television programming is the best of all communications media efforts to keep Americans knowledgeable in this area is, I believe, a fact proven beyond question."

Yet there is every reason to believe that a variety of research efforts which compliment and support the open-circuit TV thrust in reaching the "great audience" should now also be initiated. John P. Robinson, Ph.D., and James W. Swinehart, Ph.D. - social psychologists with special interest in communications at the University of Michigan Survey Research Center and School of Public Health, respectively, have summarized the discoveries of mass communications research in this way:

> In its 30 years of existence, the field of mass communications research has hardly had time to develop into a fully integrated area of scientific inquiry. Nevertheless, some findings have appeared with enough consistency and regularity to be accorded serious consideration. Five of these seem particularly relevant to the topic of this paper:

> The personal contacts within a person's immediate milieu generally have more influence on his beliefs and attitudes (especially deep-rooted attitudes) than do the mass media.
>
> Historically speaking, the quality that has moved any communication medium into the "mass" category is its conveyance of superficial rather than serious news matter.
>
> Subtlety and implicit arguments are less effective than straightforward explicit appeals in changing audience attitudes and beliefs.
>
> Those members of a mass audience who are already best informed and most interested in a topic are most likely to pick up information on that topic conveyed through the mass media. But just as important is the reverse: those people who are relatively uninformed and uninterested (usually the vast majority for any given topic, such as foreign affairs) are likely not to encounter such information in the media or, if they do, are likely to "tune out."
>
> The content of prime-time television programs reflects the mentality of the average American better than any other mass medium. The typical citizen finds bread-and-butter issues far more relevant than almost any news about national or international affairs.
>
> It would be inaccurate to give the impression that such findings do not require considerable qualification. Not one of them is known at a level of detail sufficient to adequately explain the processes through which media information is absorbed (or perhaps more appropriately, not absorbed) by the public.

What these conclusions suggest is the need to study those kinds of dissemination and forms of communication which alter the mass media approach by extending the possibilities for more definite, and measurable communications effect. That is, we assume the success of the present efforts in "acquainting" the public with the problem of air pollution and, as Dr. Johnson has suggested, "making Americans knowledgeable in this area." What is lacking is our understanding of the depth of that knowledge, the degree of influence it has upon attitudes, and most importantly, the specific action educed by the communication exposure.

A great deal of accurate scientific information is conveyed in these films. Specific programs for civic action are suggested. Factual data about the menace of Air Pollution and the possibilities of its control is woven into each of these films. Yet, from what we know of the perceiving situation (and the perceiver) in home television viewing, it is clear that much of this information was probably not retained, that the "typical" home viewer was hardly motivated to memorize facts and details, much less rush next door to seek out his neighbor and initiate a local Air Pollution control committee. All research in communications to date points toward the inescapable conclusion that the mass media are at best mediating factors in terms of social action, operating in conjunction with a variety of other factors within everyone's total experience to shape attitudes and motivate action. Whatever values mere exposure to an exciting, colorful and dramatic TV documentary about air pollution may have -- and they are many -- the fact remains that it has not completed the job.

In light of this knowledge, it is suggested that the Airlie Center now propose additional investigation into a possible combination of approaches in which ETV interest and concern is channeled into a more direct type of televised instruction to captive audiences. It is noted that many ETV stations get part of their support from Boards of Education in exchange for in-class instructional programming. It does not seem too difficult to develop a plan wherein similar kind of instructional programming could be carried out at the adult education level. Is it possible that an Air Pollution film might be programmed into a series of organizational meetings at a county- or city-wide level? What if a TV receiver were set up in all schools where the PTA was meeting on a given night. The local ETV station would arrange to program the film at a given time coinciding with the general times of the various meetings. A representative of a local air pollution information unit might also be on hand to answer questions and lead discussion after the film was viewed. The station could arrange such a discussion, of course, and televise it -- but in this case it would be abandoning the instructional function and merely continuing the one-way communication which so seldom leads to specific action and rarely produces genuine involvement and participation by the viewer.

Recommendations

a) It is recommended that further ETV dissemination methods be explored.

b) It is further recommended that a project be developed involving a specific local ETV station, public health specialists, and adult education specialists -- the aim of such project being to test the potentialities of a situation combining ETV and captive audience forms of communication for stimulating increased community action.

NOTE:

In an earlier report to the Airlie Foundation, a conceptual scheme describing the diffusion of air pollution information within the total society was prepared. A graphic representation of this scheme -- the "Ladybug" model -- is attached. Analysis of this model may stimulate further development of the type of research proposed here. (AWB)

SUMMARY AND CONCLUSIONS

The two films, BEWARE THE WIND and EAGLE'S LAMENT, produced by The George Washington University Medical Center Department of Medical and Public Affairs have reached an audience estimated to be more than 60 million people in the United States. They were shown first on prime time open circuit television throughout the United States and in addition were telecast at a later time on educational television (ETV). These films have pictorially delineated with dramatic effectiveness, as indicated by the evaluation reports prepared by Syracuse University on BEWARE THE WIND and EAGLE'S LAMENT, included, some of the principle sources of air pollution in the United States, the essence of the problem, the general types of air pollution, and some of the adverse effects of air pollution on our health and welfare.

The films focus professional and public attention on air pollution, the problems it creates, and possible approaches to a solution. These films have succeeded in crystallizing public awareness to the enormity and magnitude of the problem, that the air we breathe is but a limited resource, and that its quality is, in fact, deteriorating. In spite of our economic affluence and material wealth the very air which sustains life is being degraded by some of the sophisticated technological advances we have made, by our rising standards of living, the continuing demands for energy, as well as by our increasing population.

The films have been considered to be remarkably effective teaching instruments in highlighting the nature of the problem. They have made a significant contribution to public awareness; they have increased public understanding at all levels of society and are credited with highly motivating people to positive action.

There is a continuing need for films of this type which will give the public and community groups, which serve as the groundswell for action, a report on some of our progress in controlling the problem and about which phases still remain to be solved. As our population continues to increase, the numbers of motor vehicles, industrial plants, and other sources of pollution will also increase. Notwithstanding the fact that the degree of pollution per unit source may decrease with present or planned control methods, because of the far greater number of unit sources tomorrow's levels of air pollution may well be even higher. There is an urgent need for such additional films as a continuing reminder that, in spite of some progress, air pollution remains our most serious environmental problem. Continued vigilance is needed until the quality of the air we breathe is restored to a level of acceptability.